

ANNUAL REPORT

OF THE

COMMITTEE

OF THE

MANCHESTER AND SALFORD

SANITARY ASSOCIATION,

BEING

A SUMMARY OF THEIR PROCEEDINGS FOR THE YEAR 1866.

APPENDICES :

FIRST QUARTERLY REPORT FOR THE YEAR 1866, BY DR. MORGAN.

SECOND	DO.	DO.	DO.	DO.
--------	-----	-----	-----	-----

THIRD	DO.	DO.	DO.	DO.
-------	-----	-----	-----	-----

FOURTH	DO.	DO.	DO.	DO.
--------	-----	-----	-----	-----

A RECOMMENDATION FROM THE COMMITTEE—PUBLIC
OFFICER OF HEALTH.

MANCHESTER :

POWLSON & SONS, PRINTERS, BOW ST., JOHN DALTON STREET
1867.

At the ANNUAL MEETING of the Manchester and Salford Sanitary Association, held at the Rooms, 33, Pall Mall, on Monday, April 15th, 1867;

DR. WILKINSON IN THE CHAIR.

The Annual Report having been read;

It was moved by MR. GREAVES; seconded by MR. ROYSTON:—

That this Meeting approving of the proceedings of the Committee, as stated in their Report, request that the said Report may be printed and extensively circulated.

Moved by DR. SIMPSON; seconded by MR. W. HEATH:—

That as the physical well being of the people is directly connected with their social and national advancement, the practical efforts of the Committee to induce attention to Sanitary Laws, deserve the encouragement and pecuniary support of this Meeting and the public generally.

Moved by MR. A. RANSOME; seconded by MR. NEWTON:—

That the best thanks of the Meeting be given to the President, Vice-Presidents, Committee, and Officers for the unwearied attention they have devoted to promoting the interests of this Association, and that the following Noblemen and Gentlemen be requested to act for the ensuing year.—(For the names see opposite page.)

M. A. EASON WILKINSON.

The Chair having been taken by MR. GREAVES;

Moved by DR. SAMELSON; seconded by DR. SIMPSON:—

That the thanks of the Meeting be given to Dr. Wilkinson for the able manner in which he has conducted the proceedings of this evening.

JOHN ED. MORGAN, M.D., M.A., } Hon. Secs.
C. H. KNIGHT, }

MANCHESTER AND SALFORD SANITARY ASSOCIATION.

Committee and Officers for the Year 1867.

President :

The Right Rev. The LORD BISHOP OF MANCHESTER.

Vice-Presidents :

The Worshipful the MAYOR of MANCHESTER.

The Worshipful the MAYOR of SALFORD.

The Very Rev. the DEAN of MANCHESTER.

MARQUIS of HARTINGTON.

Hon. ALGERNON EGERTON, M.P.

Sir E. ARMITAGE.

Sir JAS. BARDSLEY, M.D.

Rev. Canon RICHSON, M.A.

THOMAS BAZLEY, Esq., M.P.

W. FAIRBAIRN, Esq., LL.D., F.R.S.

A. H. HEYWOOD, Esq.

JOHN CHEETHAM, Esq., M.P.

J. A. TURNER, Esq.

JOS. WHITWORTH, Esq., M.Inst.C.E.

Treasurer :

Mr. OLIVER HEYWOOD.

Chairman :

Mr. THOMAS TURNER; F.L.S., F.R.C.S.

Deputy-Chairman :

Mr. DANIEL NOBLE, M.A., M.D.

Committee :

Mr. A. ASPLAND, M.R.C.S.

Mr. OLIVER AYLIFFE.

Mr. Councillor BOOTH.

Dr. F. CRACE CALVERT,
F.R.S.

Mr. Aldmn C. E. CAWLEY,
M.Inst.C.E.

Mr. H. CHARLEWOOD.

Mr. Alderman T. DAVIES.

Dr. J. S. FLETCHER.

Dr. FRYER,

Mr. GEORGE GREAVES,
M.R.C.S.

Mr. WILLIAM HEATH,
M.R.C.S.

Mr. GEORGE HARRIS.

Mr. C. J. HERFORD.

Mr. H. A. HURST.

Mr. J. W. JACKSON.

Mr. Councillor KING.

Dr. LEDWARD.

Mr. T. MACKERETH,
F.R.A.S., M.B.M.S.

Mr. F. MARRIOTT.

Mr. J. W. MACLURE,
F.R.G.S., F.S.S.

Mr. THOMAS MELLOR,
F.R.C.S.

Mr. H. C. OATS.

Mr. WILLIAM REES.

Mr. A. RANSOME, M.A.,
M.B., M.R.C.S.

Dr. ROSCOE, B.A.

Mr. WM. ROYSTON.

Mr. T. D. RYDER, M.A.

Dr. SAMELSON.

Dr. SIMPSON.

Dr. R. A. SMITH, F.R.S.

Mr. J. TEALE, M.R.C.S.

Mr. G. V. VERNON,
F.R.A.S., M.B.M.S.

Dr. M. A. EASON WIL-
KINSON.

Mr. W. J. WILLIAMS.

Rev. F. C. WOODHOUSE.

Honorary Secretaries :

Dr. MORGAN.

|

Mr. C. H. KNIGHT.

COTTAGE DWELLINGS, SUB-COMMITTEE.

Mr. RANSOME,
Dr. LEDWARD,
Mr. Councillor BOOTH,
Mr. W. HEATH,
Mr. JOHN NEWTON,
Mr. GEORGE HARRIS,
Mr. OLIVER AYLIFFE,

Mr. GEORGE GREAVES,
Mr. H. A. HURST,
Mr. H. C. OATS,
Mr. A. ASPLAND,
Mr. THOMAS WORTHINGTON,
Mr. W. ROYSTON,
Mr. W. REES.

*The Chairman, Deputy-Chairman, and Honorary Secretaries are
ex-officio Members of the above Sub-Committee.*

Communications for the Committee may be addressed to—

THOMAS TURNER, Esq., Chairman,
77, Mosley Street.

Dr. NOBLE, Deputy Chairman,
Piccadilly.

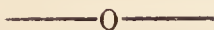
OLIVER HEYWOOD, Esq., Treasurer,
St. Ann's Street.

The Honorary Secretaries, { Dr. MORGAN, 1, St. Peter's Square.
C. H. KNIGHT, Esq., 75, Mosley Street.

Or to

Mr. C. G. CARTLEDGE, Secretary,
At the Offices of the Association, 33, Pall Mall,
(Near to the Bank of England.)

R E P O R T.



As each successive year comes to a close the subscribers to the Manchester and Salford Sanitary Association have a right to require from the acting Committee some account of the questions to which their attention has been directed during the past twelve months; and, at the same time, some general information respecting the state of the public health, information which the copious statistics contained in their Weekly Returns afford them peculiar facilities of supplying. On these two points the Committee will endeavour to throw some light in their present Report.

First, then, as regards the questions which have more especially engaged their attention. In the early part of the year 1866 numerous complaints were received respecting several churchyards situated in some of the more densely populated quarters of the town. Among these burial-grounds that belonging to St. John's Church, Deansgate, was especially animadverted upon. It was urged by gentlemen connected with this neighbourhood that serious consequences might be anticipated from the numerous interments which are still sanctioned in this already overcrowded yard, and that some decided steps should be taken to check the evil. Fortified by these representations the Committee considered themselves justified in communicating with the Secretary of State for the Home Department, and requesting that an Inspector might be sent down, with a view

of enquiring whether the Orders in Council relating to Burials were duly observed. Although this request was complied with, the churchyard being duly visited by a Government Inspector, the Committee regret to say that comparatively little in the way of improvement has as yet been effected. Surely, after the representations they made, they had a right to expect that a churchyard situated in so populous a district as Deansgate would be closed altogether.

The probability of an outbreak of Cholera in the town was another question to which the most serious attention of the Committee was directed in the early months of the year. Warned by the experience of former epidemics of this dreaded disorder, they endeavoured to urge upon the authorities the necessity of adopting some well-considered precautionary measures, with a view of being prepared to meet the danger. For the framing of such measures a Sub-Committee was specially appointed. The leading conclusions at which this Committee arrived were summarized in a letter which one of the Hon. Secretaries was requested to address to the Editors of the more influential organs of the Manchester press. It was here suggested that arrangements should be made with the different Hospitals and Dispensaries in the town, and likewise to some extent with individual chemists, for the gratuitous dispensing of some simple medicinal preparations to all persons suffering from those symptoms of premonitory Diarrhœa which so frequently precede an attack of Cholera. Secondly, that houses should be temporarily fitted up in different parts of the town for the reception of Cholera patients. Thirdly, that special conveyances should be kept in readiness at certain central stations for the removal of patients from their own homes ; and, fourthly, that medical inspectors should be appointed for the general supervision of those

precautionary sanitary measures which might be deemed requisite ; such as the isolation of the sick, the early interment of the dead, the purification of dwelling-houses, the disinfection of the evacuations before being consigned to the drains and middens, and the thorough stoving of all articles which might have come in contact with the sick. Such were some of the suggestion submitted to the authorities. It was a source of gratification to the Committee to find that they were favourably received, and in some instances they had reason to believe that they were energetically acted upon. Weeks, however, wore on, and the dreaded epidemic failed to present itself ; complaints were once more pressed upon the Committee—grave sanitary short-comings were pointed out, attention being more especially directed to the unwholesome state of the atmosphere surrounding the dwellings of the poor, owing to the noxious exhalations constantly emitted from ill-constructed and neglected middens and ashpits. These representations induced the Committee to appoint a deputation selected from their members for the purpose of waiting upon the Mayor and Corporation, and bringing under their notice certain suggestions calculated to lead to the abatement of this generally admitted and widely-felt nuisance. The document embodying their suggestions was drawn up by Mr. George Greaves, the points insisted upon being briefly these :—First : That all ash-pits should be roofed, attention being at the same time directed to their thorough ventilation. Secondly : That they should be drained to the bottom. Thirdly : That in the emptying of the ashes into the pit care should be taken that the night-soil be covered. Fourthly : That the pits should be lined around their inner sides by a cement impervious to moisture. Fifthly : That the number of privies should be increased, those out of repair being at the same time made fit for use.

After alluding to these special defects in the middens, defects more especially relating to their construction, it was shown that sufficient regularity was not exercised in the emptying of the ashpits, and that those to whom the work was entrusted frequently discharged their duty in a very slovenly manner. In the course of the interview with the Mayor numerous other questions bearing on the construction of the dwellings of the poor, the pollution of the air by smoke, and the expediency of closing cellar dwellings, were discussed at some length; and, before taking their leave, the deputation were assured that their recommendations should be submitted to the Building and Nuisance Committees of the Corporation, and that the gentlemen constituting those Committees should be requested to bestow upon them their earnest consideration.

In the month of October the Association for the Promotion of Social Science held their Annual Meeting in Manchester. It appeared to the Committee that the occasion of this visit would afford them an opportunity of making more generally known the objects for which the Association was founded, the nature of the work on which it is engaged, and the amount of success which has attended its efforts. Accordingly they passed a resolution requesting two of their members, Mr. Arthur Ransome and Mr. Royston, to draw up a paper on the health of Manchester during the last fifteen years; the time, in fact, during which the Association has been in active operation. This document containing much valuable information respecting the public health was read by Mr. Ransome on the 6th of October, and will be published in full in the annual volume of the transactions of the Association of Social Science.

The appointment of a medical officer of health is another question which has engaged the attention of the Committee.

At a meeting held at the Association's Rooms on Friday, the 7th of September, it was resolved that letters should be written to Dr. Trench and Dr. Robinson, the medical officers of Liverpool and Leeds, requesting them to communicate to the Committee some information respecting the extent of the powers with which they are entrusted, the nature of the duties they are called upon to fulfil, the authorities to whom they are responsible, and, at the same time, some account of the steps which led to their being appointed. To these gentlemen and to Dr. A. P. Stewart, of London, the cordial thanks of this Committee are due for their most valuable information. Other statistics bearing on this subject were likewise obtained from some of the metropolitan officers of health. Fortified by these and sundry other opinions the Committee determined to press upon the authorities the expediency of appointing a highly-qualified medical man as health officer for Manchester and Salford; and, with the view of carrying this resolution into effect, they appointed a Sub-Committee consisting of Dr. Noble, Mr. Ransome, and Dr. Simpson, and requested them to embody, in the form of a paper, the advantages likely to accrue from such an appointment. A paper drawn up by these gentlemen was communicated to the Association in the early part of December. It sets forth "the necessity of appointing some competent medical man, well and practically skilled in the duties of sanitary police, as an officer of health. Without such an authorized and experienced head, the Sanitary Association would submit that the efficient action of public bodies in attempts to apply the results of sanitary researches will necessarily be impeded, whether such attempts be made in ordinary times for the diminution and prevention of current disease, or for the mitigation and suppression of epidemics in their seasons of invasion.

“The reduction to practice of sanitary science is not as is sometimes supposed a mere affair of removing what are called nuisances; it involves a great deal more than this,—the carrying out of building regulations so as to secure due ventilation, supplies of water and house drainage, the management of incidental outbreaks of contagious diseases so that their unnecessary diffusion be prevented, and the skilful carrying out of right methods of disinfection in periods of apprehended pestilence.

“To advise public bodies upon all such matters, to assist as far as practicable in giving effect to his recommendations would constitute the duties of an officer of health.”

A favourable answer to this communication was received from the Salford Corporation, who informed the Committee that by a bill already deposited in Parliament they were seeking power to appoint an officer of health, and authority to act upon his reports. It may be hoped that, inasmuch as the attention of the Corporation of Manchester has now been directed to this subject, they will not permit it to drop. If, however, it is desired that such an officer should prove himself a really efficient public servant, it is indispensable that considerable freedom of action be allowed him, while at the same time he receive a liberal salary, on the express understanding that he devote his whole time and attention to the duties of his post.

Such are some of the more prominent questions to which the deliberations of the Committee were directed during the year 1866.

It has afforded them much gratification to find that on all occasions on which they have felt it their duty to bring before the notice of the Corporation of Salford those defects and shortcomings in matters relating to the public health which appeared to them to call for remedial measures, their sugges-

tions have been received in the most friendly spirit, while in not a few instances they have been energetically acted upon. The same remarks apply to the Boards of Guardians of Manchester and Chorlton, the members of which not only supply them with the statistics required for their Weekly Returns, but cordially co-operate with them in their efforts to ameliorate the condition of the poor.

In directing attention to the tables of death and disease appended to this Report the Committee would remark that, although the town fortunately escaped an epidemic of Cholera, the year nevertheless must be pronounced an unusually sickly one. The deaths were very numerous, amounting in the aggregate in the eleven registration districts which supply returns to the Sanitary Association to 13,989. This total would probably represent a death-rate of about 32 in every 1,000 of the population. From the difficulty of estimating the population of Manchester at the present time it is impossible to give the exact figure. The most unsatisfactory feature in the return will be found under the Fever columns, the deaths from this disorder amounting to 1,061. In no previous year since the reports of the Sanitary Association first appeared did so many persons succumb to the disease. During the last four years it has steadily gained ground: in 1863 it caused 399 deaths, in 1864 469, in 1865 861, and last year 1,061. These figures should receive the most serious consideration from the authorities of the town; the rise and fall of Continued Fever being a most valuable index of the sanitary conditions under which life is passed in a particular district—far more trustworthy in fact than the fluctuations of any other disease the etiology of which has been scientifically investigated.

Diarrhœa, also a valuable guage of the public health,

though probably in a far greater degree influenced by climatic changes, proved nearly as fatal as Fever, being credited with 1,044 deaths; in the preceding year it claimed a still heavier tribute, carrying off no fewer than 1,385 persons. It will be remembered that the year 1865 was characterized by singularly genial and sunny weather, especially during those months in which Diarrhœa is in the ascendant. In the years 1863 and 1864 848 and 687 persons died from this disorder.

In the Appendix will be found a table setting forth the aggregate number of new cases of disease recorded in the public practice of Manchester and Salford, in the course of the year 1866. It is compiled from the statistics published regularly by the Association in their Weekly Returns, and contains much interesting information respecting the distribution of sickness and the particular districts in which it proved most virulent. It appears from these returns that the total number of new cases of disease and injuries occasioned by accidents, which came under the observation of the medical officers connected with the Hospitals, the Workhouses, the Poor Law Districts, and the Gaols, in the course of the fifty-two weeks amounted to 74,960. Among these patients 3,182 deaths were recorded, in other words 1 case in every 23·5 terminated fatally. This death-rate among patients seen in public practice is the highest recorded since the returns of the Sanitary Association first appeared in August, 1861. On comparing the aggregate total of new cases of disease seen during the last three years it is singular how nearly the numbers correspond; in 1864 there were 75,490 in 1865 74,490 and in 1866 74,960. The difference in the number of deaths during the same years was considerably greater; in 1864 these amounted to 2,645, or 1 in 28; in 1865 to 2,927, or 1 in 25; and in 1866 to 3,182,

or 1 in 23·5. Hence it would appear that in the course of last year diseases generally proved unusually fatal and severe.

It will be instructive to scrutinize the table of returns with a view of learning how these 74,950 cases were distributed, what proportion of them fell to the Hospitals, how many were allotted to the Workhouses, and how many again applied direct to the medical officers of the Poor Law Districts, and were attended at their own homes. And, first, as regards the Hospitals and Dispensaries. These Institutions are credited with 45,248 of the patients, or 61 per cent. of the whole; the Poor Law Districts and Workhouses with 28,466, or 38 per cent.; while the remaining 1,500 are assigned to the two Gaols. The following are the aggregate returns of the leading Hospitals and Dispensaries:—At the Royal Infirmary the in, out, and home patients amounted to 22,867, at the Salford Hospital to 9,408, at the Clinical Hospital to 3,899, at St. Mary's to 3,191, at the Chorlton Dispensary to 2,981, and at the Ardwick and Ancoats Dispensary to 2,902. At the same time the disease columns from the Workhouses show that the Manchester Workhouse admitted into its sick wards 7,369 patients, the Chorlton 4,214, and the Salford 1,150. The most unsatisfactory feature in these returns will be found under the Fever column; this disease under its various forms attacked, in the course of the year, no fewer than 4,752 poor persons, proving fatal to 426 of them, or 1 in 11. It has been already stated that the total number of deaths assigned to Fever in Manchester and Salford in the death registers for the year, did not exceed 1,061; from these figures it will be seen how marked is the intensity with which Fever falls upon pauper and hospital patients, no fewer than two-fifths of the whole of the Fever deaths occurring among persons of this class. Tested by this standard—its fatality among

the poor—Continued Fever contrasts in a very striking manner with every other disease. Thus these returns confirm what has long been admitted that, wherever poverty and sanitary negligence co-exist, there Fever may to a certainty be looked for. Although it is believed by many persons whose opinion is entitled to consideration, that Fever is in many respects subject to the same laws as those which influence the propagation of Diarrhoea it is still noteworthy, on looking at these returns, that whereas two out of every five Fever deaths occurred among patients too poor to pay for medical attendance, not more than one out of every eleven fatal cases of Diarrhoea was observed among persons of the same class. Hence it follows that, during the past year at all events, Diarrhoea was not so exclusively confined to the poorest classes as many sanitary reformers seem disposed to maintain.

In examining the last four quarterly returns of Fever it is satisfactory to find that, during the latter months of the year, the disease proved decidedly less fatal than in the former, the deaths relatively to cases being far less numerous. Thus while 1 case in every 9·5 proved fatal in the first and second quarters, in the third and fourth the proportion was not more than 1 in 13·9. It has been frequently shown, both in these reports and in those which appear at the end of every quarter, that there is no more sure sign of the gradual subsidence of an epidemic than a diminished rate of intensity. But although it may be conceded that, with the advance of the year, some improvement was observable in the Fever returns, it is nevertheless true that the disease still prevails to a lamentable extent, and so long as from 80,000 to 100,000 of the population of Manchester and Salford are housed in the miserable tenements they at present occupy it is difficult to see how it can be otherwise. It may be

laid down as a general rule, admitting in this neighbourhood of very few exceptions, that the great Fever beds of Manchester and Salford—forcing-places which not only breed Fever but propagate it indefinitely, are those dwellings of the poor which are let at sums varying from one shilling to three shillings per week. Within this rent-range will be found all the cellar-dwellings of the town, and those known as the back-to-back houses. It can scarcely be doubted that if the vast harm and waste arising from these fever nests were fully realised public opinion would call loudly for them to be entirely swept away. Looking at the present value of cottage property in Manchester it may be stated generally that a payment of 3s. 6d. a week in rent is the lowest sum at which it is possible for a poor family to procure for themselves a healthy dwelling.

It has been already stated that the total number of new cases of disease seen in public practice in Manchester and Salford, during the year 1866, amounted to 74,960; of which 3,182, or 1 in every 23·5, ended fatally; and it has been further shown that 13,989 deaths were registered during the same period. If it be assumed that, in other classes of the population, accidents and sickness bore the same ratio to deaths as that here assigned to Hospital and Pauper patients, it would then appear that the number of persons sufficiently indisposed to require medical advice amounted in the course of the year to 328,737; in other words, on an average about three out of every four inhabitants of Manchester and Salford considered it necessary to send for a doctor.

The Committee desire to direct attention to the accompanying List of Lectures, which were delivered during the winter months of the year. It has afforded them much satisfaction to find that these Lectures were very generally attended by the

class of persons for whom they were designed,—men and women who appeared anxious to profit by the advice they received. The audiences, viewed in the aggregate, were large, no fewer than 7,000 persons having attended the twenty-two lectures. The subjects were treated in a thoroughly practical and simple manner, and the attention with which they were listened to, proved clearly the interest they awakened. The names of the Lecturers, which are appended, are a sufficient guarantee that the work was, in every respect, well done.

The financial position of the Association is a subject which has lately occasioned some anxiety to the members of the Committee. Here, as in the case of all other Institutions which are dependent upon annual contributions for their support, it has been found that, as gaps arise in the lists of subscribers, owing to deaths, depression of trade, and other causes, they are not filled up by new names. As the work carried on under the auspices of the Committee is really a useful one, they venture confidently to hope that the friends of sanitary progress will come to the rescue and render assistance; additional annual subscriptions to the amount of about £50 are all that is needed to meet the deficiency. They are happy to state that since these facts became generally known several liberal donations have been received, one benevolent lady having forwarded to the Chairman the sum of £50.

In conclusion, the Committee desire once more to return their most cordial thanks to the various contributors to their Returns,—to all those gentlemen on whose kind assistance the efficient working of the Society mainly depends. Without their co-operation, the information which they would be enabled to afford on questions bearing on the public health would be meagre indeed,—what these gentlemen are doing the Weekly

Returns, which have now appeared regularly for nearly seven years, sufficiently testify. During these seven years the contributors belonging to the medical profession have recorded nearly half-a-million cases of disease, besides a vast amount of most useful information respecting the sanitary condition of their respective districts. At the same time the Registrars have furnished the data for the mortality and birth tables, while other gentlemen, by supplying meteorological observations, enable the readers of the reports to study the atmospheric changes on which the ebb and flow of epidemic diseases so largely depend. The Committee consider it their duty to direct attention to the continued kindness of these gentlemen, in order that all those who are interested in the issue of these Returns, may bear in mind who really are the persons to whom their gratitude is due.

THE FOLLOWING LECTURES HAVE BEEN DELIVERED
DURING THE YEAR:

LECTURER.	SUBJECT.	PLACE.
THOS. TURNER, Esq. F.R.C.S.	<i>Man's Responsibility as a Social and Sanitary Agent</i>	St. Mary's School, Upper Moss Lane, Hulme.
Ditto	<i>The Blood and Circulation.</i>	Christ Church School, Hope-street, Salford.
Ditto	<i>Health and Education</i>	St. Jude's School, Canal- street, Ancoats.
Ditto	<i>The danger of Ignorance, in connection with the Laws of Health.....</i>	Hulme Town Hall.
Ditto	<i>The Home Duties of the Poor</i>	St. Peter's School, Collier- street, Greengate, Sal- ford.
Ditto	<i>Man's Ignorance of the Unhealthy Snares that surround him.....</i>	Ashley-lane School, Colly- hurst-road.
Ditto	<i>The Use and Abuse of the Means of Living</i>	St. Patrick's School, Live- sey-st., Oldham-road.
Ditto	<i>Life and Death</i>	Levenshulme Church School.
Dr. LEDWARD, M.R.C.S ...	<i>Bad Weather</i>	Christ Church School, Hope-street, Salford.
Ditto	<i>The Cost of Living in a Large Town</i>	Co-operative Stores Lec- ture-room, Downing- street, Ardwick.
Ditto	<i>Food and Clothing</i>	St. Michael's School, Mil- ler-street.
Ditto	<i>Epidemics : How to prevent them.....</i>	Unitarian School, Bridge- street, Strangeways.

LECTURER.	SUBJECT.	PLACE.
Dr. J. SHEPHERD FLETCHER	<i>The Art of Prolonging Life</i>	Salford Town Hall.
Ditto .....	.....<i>Ditto</i>	Unitarian School, Bridge- street, Strangeways.
G. MORLEY HARRI- SON, Esq. M.R.C.S	<i>Poisons in the Atmosphere</i>	St. Matthias's School, Broughton-road.
Ditto	<i>Atmospheric Causes of Disease</i>	St. Peter's School, Fleet- st., Lower Mosley-st.
LEO GRINDON, Esq.	<i>Poisonous Plants</i>	St. John's School, Miles Platting.
ARTHUR RANSOME, Esq., M.B., M.A., Cantab., M.R.C.S.	<i>Some of the Marvels of Man's Body</i>	Working Men's Bible Class, Bank-st., Hulme
Rev. THEOPHILUS WOOLMER	<i>Things necessary to Health</i>	Wesleyan School, Daniel- street, New Islington.
Rev. ST. VINCENT BEECHEY, M.A	<i>The Moon as a Sanitary Commissioner</i>	Rusholme-road School.
EDWARD MEACHAM, Esq., M.R.C.S.	<i>Drink, Disease, and Death</i>	Working Men's Bible Class, Bank-st., Hulme
Rev. JAS. BARDSLEY, M.A.	<i>The Domestic Constitution</i>	St. Catharine's School, Newtown.

OLIVER HEYWOOD, Esq., Treasurer, in Account with the Manchester and Salford Sanitary Association.
 JANUARY 1ST, 1866, TO DECEMBER 31ST, 1866.

Dr.

Cr.

	£	s.	d.		£	s.	d.
To Balance in Bank, 31st December, 1865	17	18	5	By Rent and Taxes			37 0 0
„ Interest allowed by Bankers, to 31st December, 1866	0	13	4	„ Secretary's Salary			60 0 0
„ Subscriptions	232	6	0	„ Commission allowed Collector			11 12 2
„ Tracts sold	1	11	4	„ Expenses attending Lectures			7 9 4
„ Donations—				„ Postages			13 12 11
Miss Atherton	50	0	0	„ Petty Cash, including Wages of Boy			16 11 4
A Friend	10	0	0	„ Printing			114 10 6
„ Amount overpaid, August, 1865	—	60	0 0	„ Advertising			11 8 11
		0	10 0	„ Stationery and Books			3 7 6
				„ Diagrams			3 10 0
				„ Balance in Bank			33 16 5
							<u>£312 19 1</u>

Balance in Bank brought down	£33	16	5
Petty Cash in Secretary's hands	3	7	8

Examined and found correct:

Manchester,
 December 31st, 1866.

WM. BOOTH.
 WM. ROYSTON.

Members from Donations in former Years.

	£	s.	d.
Atherton Miss (1866).....	50	0	0
A Friend, per T. Turner, Esq. (1866)	10	0	0
Barbour Robert, Esq.	10	0	0
Binyon Miss (Clifton).....	5	0	0
Brooks Samuel, Esq.	5	0	0
Chadwick R., Esq.	20	0	0
Callender W. R., Senr., Esq.	5	0	0
Coultate E., Esq.	5	0	0
Ellesmere The Earl of.....	5	0	0
Gardner Robert, Esq.	5	5	0
Gillibrand P., Esq.	5	0	0
Heywood E. S., Esq.	20	0	0
Heywood Sir B., Bart.	5	5	0
Heywood Arthur H., Esq.	5	0	0
Heywood James, Esq.....	5	5	0
Heywood Oliver, Esq.....	15	0	0
Houldsworth Henry, Esq.	10	0	0
Jones R. Jennings, Esq.	5	0	0
Jones W. C., Esq.....	5	0	0
Mackintosh Messrs. C., and Co.	5	5	0
Manchester The Lord Bishop of	10	0	0
Potters and Norris Messrs.....	5	5	0
Plant James, Esq.	5	0	0
Shunck, Souchay, and Co., Messrs.	5	0	0
Spafford George, Esq.....	5	5	0
Taylor J. E., Esq.....	5	5	0
Todd and Coston Messrs.	5	0	0
Turner J. Aspinall, Esq., M.P.	5	0	0
Watkin W. B., Esq.....	10	0	0
Wood W. Rayner, Esq.	5	0	0

SUBSCRIPTIONS.

	£	s.	d.
Ashton F., Esq	1	1	0
Atherton James, Esq., Bridgewater-place	2	2	0
Atkinson F., Esq., 34, Brown-street.....	1	1	0
Agnew Thomas, Esq., Fair Hope, Eccles	1	1	0
Atkinson and Gould, Messrs., 6, Mosley-street	1	1	0
Andrew Henry, 13, Bread-street, High-street	1	1	0
Alcock Misses, Nelson-street, Chorlton-upon-Medlock.....	1	1	0
Amies Nathaniel Jones, Esq	1	1	0
Barbour, Messrs. R., and Brother, Aytoun-street.....	2	2	0
Brooks William Cunliffe, Esq., the Bank, King-street.....	2	2	0
Bardsley, Sir James L., M.D., Chatham-street,.....	1	1	0
Behrens Messrs. S. L., and Co., 22, Oxford-street.....	2	2	0
Brown Messrs. J., Son and Co., Portland-street	2	2	0
Butterworth and Brooks, Messrs., Charlotte-street	2	2	0
Bellhouse, Messrs. J. and W., Minshull Mills, Old Garratt...	2	2	0
Bannerman J. A., Esq., 33, York-street	1	1	0
Browne Dr. Henry, Clairville, Oxford-street	1	1	0
Brown William B., Esq., Market-street	1	1	0
Booth William, Esq., Oldham-street	1	1	0
Boutflower J., Esq., Bury New Road	1	1	0
Barge Thomas, Esq., 35, Dickinson-street	1	1	0
Buckley Edmund, Esq.,	1	1	0
Bazley Thomas, Esq., M.P.	1	1	0
Behrens Jacob, Esq., 41, Portland-street	1	1	0
Beever, Darwell, and Taylor, Messrs., Princess-street.....	1	1	0
Bazley Henry and Co., Messrs., Chapel-street, Ancoats	1	1	0
Binyons, Robinson, and Co., Messrs., St. Ann's-square	1	1	0

	£	s.	d.
Bright Messrs. and Co., 22, New Brown-street	1	1	0
Barker N., Esq., Rusholme	0	10	6
Birch Rev. Edward, M.A., 23, Plymouth-grove.....	0	10	6
Bromiley Messrs. and Sons, 3 Cateaton-street	0	10	6
Bowman E., Esq., Victoria-park.....	0	10	6
Booth Mr. Councillor, Salford	0	5	0
Bolderson J., Junr., Esq., 86, Bury New Road	0	10	6
Carlton Messrs. J., Walker, and Watson, 11, Mosley-street	2	2	0
Carlisle Brothers Messrs., 1, St. Peter's-square.....	1	0	0
Cunliffe and Sons, Messrs., Bond-street, Nether-street, Tipping-street, Ardwick.....	1	1	0
Crowdson T. D., Esq	1	1	0
Carver, Brothers, and Co., Messrs., 7, Lower Mosley-street .	1	1	0
Crum Walter, Messrs., and Co., 76, Mosley-street	1	1	0
Calvert Dr. F. Crace, Bond-street	1	1	0
Carver William and Co., Messrs., 15, Mosley-street.....	1	1	0
Chadwick David, Esq., 64, Cross-street	1	1	0
Compton Joseph, Esq	1	1	0
Charlewood H., Esq., 5, Clarence-street.....	1	1	0
Cooke Thomas, Esq., Oxford-street Twist Co.	1	1	0
Collins Edward, Esq., Corn Mill, 35, Long Millgate	1	1	0
Chadwick John, Esq., 12A, Mosley-street	0	10	0
Cawley, C. E., Esq., Carlton-buildings, Cooper-street	1	1	0
Corbett J., Esq., Cross-street	0	10	6
Dugdale, Messrs. John, and Brothers, Booth-street.....	1	1	0
D'Hauregard, Messrs. H., and Co., Little Lever-street	1	1	0
Elce, Messrs. John, and Co., Jersey-street, Ancoats	1	1	0
Farbridge and Halliday, Messrs. 57, King-street	1	1	0
Findlater and Mackie, Messrs.	1	1	0
Fairbairn William, Esq., Polygon, Ardwick	1	1	0
Franklin J. A., Esq., Bury New-road	0	10	0
Fryer, Benson, and Forster, Messrs., Chester-st., Oxford-st..	1	1	0
Franks Abraham, Esq., 114, Deansgate.....	0	10	6
Fullarton John Alexander, Esq., 49, Major-street	1	1	0

	£.	s.	d.
Gladstone Robert, Esq., 4, Half-moon-street.....	2	2	0
Gardner Robert, Esq	2	2	0
Greg, Brothers, and Co., Messrs., Booth-street.....	2	2	0
Galloway Messrs. W. and J., Chester-road, Hulme	2	2	0
Graham Messrs. William, and Co., 86, Major-street	1	1	0
Galloway Messrs. J., and Co., 7, Mosley-street	1	1	0
Grover J. B. K., Esq., 1, Elm-street, Water-street	1	1	0
Gaskell Rev. William, 46, Plymouth-grove	1	1	0
Gladstone Murray, Esq., Cross-street	1	1	0
Gibson Rev. Canon, Polygon, Ardwick	1	1	0
Greaves George, Esq., 336, Stretford-road.....	0	10	6
Grafton F. W. Esq., 25, Portland-street.....	2	2	0
Harter William, Esq., Cheapside, King-street	2	2	0
Heywood Arthur H. Esq., The Bank	2	2	0
Heywood E. S., Esq. „	2	2	0
Heywood Oliver, Esq. „	2	2	0
Hunter Thomas, Esq., Cheapside, King-street	2	2	0
Houldsworth H., Esq., 34, Little Lever-street	2	0	0
Houldsworth Messrs. J., and Co., 23, Portland-street	1	1	0
Harrison G. Morley, Esq., 6, Piccadilly	0	10	6
Hadfield Messrs. S. & G., 24, Fountain-street	1	1	0
Ireland Messrs. Alexander, and Co., Pall Mall	1	1	0
Jackson Messrs. E. and J., Portland-street	1	1	0
Jewsbury and Crux, Messrs., Deansgate	1	1	0
Jackson J. W. Esq.	1	0	0
Jackson H. B. Esq., Chambers, 57, King--street	0	10	6
Joule Dr. J. P., Thorncliffe, Old Trafford	0	10	6
James and Chabot, Messrs., Portland-street	1	1	0
Kershaw, Sidebottom, and Co., Messrs., Portland-street.....	2	2	0
Kipping J. S. Esq., Bank of England, King-street	1	1	0
Keighley J., Esq., York-street	1	1	0
Kingsley John, Esq., St. Ann's-street.....	0	10	0
Kessler William, Esq., 33, Dale-street	1	0	0

	£	s.	d.
Langton Wm., Esq., M'chester & Salford Bank, Mosley-st..	2	2	0
Leissler John, Esq., Messrs. Du Fay and Co., Booth-street...	2	2	0
Langworthy, Brothers, and Co., Messrs., Greengate, Salford	1	1	0
Lyon Messrs. Edward, and Brother, David-street	1	1	0
Le Mare E. R., Esq., 34, York-street	1	1	0
Lee Messrs. Daniel, and Co., Fountain-street	2	2	0
Lund Edward, Esq., St. John-street, Deansgate	1	1	0
Lamb James, Esq., John Dalton-street	1	0	0
M'Laren Messrs. James and Nephew, 18, George-street.....	2	2	0
Macintosh Messrs. Charles, and Co., Cambridge-street	2	2	0
Munn Messrs. John, and Co., 52, Fountain-street	2	2	0
Micholls Horatio, Esq., 7, Nicholas-street	1	1	0
Makin and Walker, Messrs., 17, Mosley-street	1	1	0
M'Connel, W., Esq., Henry-street, Ancoats	2	2	0
M'Connel J., Esq., Bent-hill, Prestwich	2	2	0
M'Naughton and Thom., Messrs. 80, Mosley-street.....	1	1	0
Morris William, Esq., James-street, Salford	1	1	0
Moller Isaac Joseph, Esq., 8, Norfolk-street	1	1	0
Mellor Thomas, Esq., 204, Clairville, Oxford-street.....	1	1	0
Midwood William Bellhouse, Esq., 198, Oxford-street.....	0	10	6
M'Clure Messrs. John, and Son, Bond-street	1	1	0
Mendel Sam Esq., Portland-street	1	1	0
Mayson J. S., Esq., Charlotte-street	0	10	0
M'Kerrow, Rev. Dr., 85, Plymouth-grove	0	10	6
M'Niven Charles, Esq.	1	1	0
Novelli and Co., Messrs., 60, George-street	2	2	0
The Strines Printing Co., George-street.....	2	2	0
Neild Alfred, Esq., George-street	1	1	0
Nicholls B., Esq., Eagley House, Stockport-road	1	1	0
Noble Dr., 103, Piccadilly	1	1	0
Newton John, Esq., Carlton Buildings	1	1	0
Ogden Messrs. Robert, and Sons, Brook-street, London-road	2	2	0
Ogden Messrs. R., and Sons, ,, ,,	1	1	0
Ogden Dr, Lever-street	0	10	0

	£	s.	d.
Ogden Henry, Esq., 126, Deansgate	0	10	6
Ovens Edward, Esq., County Court.....	1	1	0
Oxley Edwin, Esq., 43, Port-street	0	10	6
Peel Messrs. J. and G., Pollard-street, Ancoats	2	2	0
Philips Messrs. J. N. and Co., Church-street	2	2	0
Peel Messrs. John and Co., 11, Peel-street, Duke-street.....	2	2	0
Potters and Taylor Messrs., 1, George-street.....	2	2	0
Philips Herbert, Esq., Church-street	1	1	0
Potter Messrs. Edmund, and Co., 10 Charlotte-street.....	1	1	0
Philippi Edward, Esq., Hall-street, Oxford-street.....	0	10	0
Pearce Messrs. M., & Co., Bale-street, Lower Mosley-street .	1	1	0
Powlson and Sons Messrs., Bow-street	1	1	0
Pearson Mr. Alderman, Bridgewater-place.....	0	10	6
Parlane James, Esq., Dickinson-street	1	0	0
Reiss Brothers Messrs., 104, Cross-street	2	2	0
Ross, Boyd, and Co., Messrs., Cromford-court	1	1	0
Ransome Arthur, Esq., Peel-terrace, Bowden	1	1	0
Ross Edward, Esq., London-road Station	1	1	0
Richson Rev. Canon, 11, Shakespere-street	1	1	0
Rylands and Son Messrs., New High-street	1	1	0
Rickards F. P. Esq., 12, Police-street, King-street	1	1	0
Ree H. P. Esq., 27, Faulkner-street	1	1	0
Ross William, Esq., 9, Leaf-square, Pendleton.....	1	1	0
Ralli E., Esq., 11, Bloom-street, Aytoun-street.....	1	1	0
Rumney Robert, Esq., 54, George-street	0	10	0
Rice J. Esq., Pall Mall	0	5	0
Rigby John, Esq., 15, Piccadilly	1	0	0
Reid John, Esq., Bank of England, King-street	1	1	0
Ryder J. V. L., Esq., Fallowfield.....	1	1	0
Samson and Leppoc, Messrs. H. J. and Co., St. Peter's-sq. .	2	2	0
Schuster, Messrs. Leo, Brothers, and Co., 12, Sackville-street	2	2	0
Sharp, Stewart, and Co., Messrs., Atlas Works, Oxford-street	2	2	0
Slater, W., Esq. (Slater and Heelis), Princess-street	2	2	0
Samelson Dr., 15, John-street, Deansgate	1	1	0

	£	s.	d.
Schunck, Souchay, and Co., Messrs., Peter-street	1	1	0
Slagg Messrs. John, and Co., 12, Pall Mall	1	1	0
Smith G. Fereday, Esq., Crown-street, Hulme.....	1	1	0
Smith W., Esq., 98, Mosley-street	1	1	0
Smith Dr. R. Angus, York-place, Rusholme	1	1	0
Satterfield J., Esq., St. Ann's-square	1	1	0
Shaw John Esq., Brewery, City-road	1	1	0
Standring John, Esq., 18, Fountain-street.....	1	0	0
Stoechr, Messrs. E. and Co., Deansgate	1	1	0
Turner Thomas, Esq., 77, Mosley-street.....	2	2	0
Taylor, Garnett, and Co., Messrs., Cross-street	2	2	0
Tysoe, Messrs. Charles and Sons, New Cannon-street.....	2	2	0
Turner J. Aspinall, Esq., 50, Cross-street	1	1	0
Turner Wright, Esq., Brindle Heath, Pendleton	1	1	0
Thompson Joseph, Esq., Pin Mill, Ardwick	1	1	0
Trapp S. Clement, Esq., Cooper-street	0	10	0
Vernon Messrs. G. V. and Co., Piccadilly Mills.....	2	2	0
Westhead Messrs. J. P. & E., and Co., 49, Piccadilly	2	2	0
Wadkin and King Messrs., 12, Chepstow-street	1	1	0
Weston S., Esq., 3, Moulst-street, Cross-street	1	1	0
Warner Thomas, Esq., 9, Cross-street.....	1	1	0
Winterbottom A., Esq., 29, Mosley-street	1	0	0
Wilkinson Dr. M. A. E., Greenheys.....	1	1	0
Watts Sir James, Kt., Portland-street	1	1	0
Williams Messrs. L. and E., Upton-street, London-road.....	1	1	0
Worthington Thomas Esq., 54, John Dalton-street.....	1	1	0
Whitworth Messrs. B., and Brother, 4, Little Lever-street .	2	0	0
Whitehead Dr., 87, Mosley-street	1	1	0
Wells, Cook, and Potter, Messrs. 18 & 20, Mosley-street ...	1	1	0
Waters, Messrs. J. E. and Co., 31, Portland-street	1	1	0
Wood M. Bateson, Esq., 19, Princess-street	1	1	0
Woodhouse, Rev. F. C., St. Mary's Rectory, Upper Moss-lane	1	1	0
Westmore, Rev. H. H., 15, York-street, Cheetham	0	10	6
Williams Mr. Councillor, 1, Marlborough-square	0	10	0
Yates William, Esq., Green Mount, Harpurhey	1	1	0

MANCHESTER AND SALFORD

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC

New Cases of Disease coming under Treatment

MANCHESTER.																
Area in Statute Acres	Manchester Township 1,645															
Population in 1861	,, ,, 185,050															
DISEASES.	POOR LAW DISTRICTS.							PUBLIC INSTITUTIONS.								
	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts	ROYAL INFIRMARY.						CHILDREN		City Gaol
	1	2	3	4	5	6		Workhouse	In-patients	Out-patients	District I.	District II.	District III.	St. Mary's Hospital	Clinical Hospital	
Small-pox	1	5	3	3	2	5	19	15	25	..	..	7	5	5	2	..
Chicken-pox	2	..	..	..	..	2	4	..	..	..	1	..	..	2	3	..
Measles	10	6	4	10	8	30	68	..	1	6	1	3	10	21	20	..
Scarlatina	3	14	6	3	17	7	50	8	10	3	2	17	35	6	20	..
Diphtheria .....	..	..	..	..	..	2	2	..	1	3	..	..	..	..	..	..
Whooping-cough	5	5	7	2	..	10	29	..	..	21	..	3	2	147	81	..
Croup	1	..	1	1	..	2	5	..	..	..	..	..	..	2	1	..
Diarrhœa.....	1927	220	264	157	27	251	2846	186	6	257	14	5	40	333	451	164
Dysentery	5	4	2	5	7	7	30	48	3	3	1	2	1	18	3	4
Continued Fever	179	92	155	70	136	196	828	1081	221	23	46	145	168	174	3	11
Erysipelas	7	3	2	4	5	7	28	45	4	28	7	11	17	2	..	4
Rheumatism	34	31	16	25	19	27	152	684	99	734	45	67	87	24	117	81
Neuralgic Affections	5	..	9	1	2	1	18	60	92	181	14	5	25	15	129	68
Constitutional Syphilis	6	3	1	2	2	7	21	381	5	746	10	10	17	19	59	113
Phthisis	12	26	20	30	19	15	122	315	16	1010	69	89	97	39	100	18
Insanity	11	12	19	3	..	9	54	236	..	2	3	..	..	..	1	..
Bronchitis, Influenza & Catarrh	195	214	84	133	128	281	1035	1284	39	1496	104	153	203	239	766	224
Pleurisy and Pneumonia	22	17	5	14	5	4	67	158	30	130	19	34	35	7	37	..
Skin Diseases	25	13	14	10	4	14	80	440	1	486	4	1	3	141	753	131
Dyspepsia	16	21	1	13	20	3	74	739	12	1056	7	7	29	101	620	123
Atrophy and Anæmia.....	..	..	3	..	13	24	40	12	..	..	..	..	6	..	..	..
Accidents and diseases not classified	756	231	519	352	181	536	2575	1677	2175	11343	232	270	411	1896	733	131
TOTAL	3222	917	1135	838	595	1440	8147	7369	2740	17528	579	829	1191	3191	3899	1072

Medical Officers to whom the Association

(1) *Mr. R. M. Mann,*
 (2) *„ J. Broadbent,*
 (3) *„ Edward Meacham,*
 (4) *Dr. Braddon,*

(5) *Mr. Octavius Dean,*
 (6) *Dr. Ledward,*
 (7) *Mr. J. Westmoreland.*
 (8) *Dr. George Reed,*

(9) *Mr. W. J. Tattersall,*
 (10) *„ W. H. Sutcliffe,*
 (11) *„ C. J. Cullingworth.*
 (12) *„*
 (13) *„ H. Runcorn,*

SANITARY ASSOCIATION.

INSTITUTIONS OF MANCHESTER AND ADJOINING DISTRICTS.

during the Year, ending December, 1866.

SALFORD.					HULME.			CHORLTON.	ARDWICK.	PENDLETON AND PENDLEBURY.					DEATHS.
..... 1,329 .....					.... 477 ....			.. 646 ..	..508..	..... 2,650 .....			.....Area in Statute Acres.		
..... 70,967 .. ...					.. 68,209.....			..44,850..	21,739	..... 24,448 .....			.....Population in 1861.		
POOR LAW DISTRICT.		PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.			Poor Law District	Dispensary	Poor Law District	Ardwick & Ancoats Dispensary	Chorlton Union Workhouse	Total.	DISEASES.	
Greengate	Regent Road	Workhouse	Dispensary	New Bailey	St. George's	Medlock	St. Philip's								
16	17	18	19	20	21	22	23	24	25	26	27	28			
1	1	6	12	2	..	1	1	2	16	7	6	2	135	Small-pox	6
..	..	1	..	..	..	..	..	..	2	4	..	7	24	Chicken-pox	1
..	..	5	30	..	22	15	19	25	81	1	4	40	372	Measles	15
3	1	12	68	..	29	17	10	13	51	33	14	21	423	Scarlatina	19
.	..	..	1	..	..	1	..	..	..	2	..	..	10	Diphtheria	3
3	8	6	153	..	15	19	24	15	40	21	25	16	628	Whooping-cough	27
..	..	..	5	..	1	1	2	1	4	4	1	1	28	Croup	7
453	425	43	324	161	89	95	71	62	159	50	49	138	6421	Diarrhoea ..	94
16	7	1	16	1	..	4	5	11	6	8	9	3	200	Dysentery.	2
123	175	328	449	1	174	80	169	57	34	55	93	314	4752	Continued Fever	426
3	10	7	46	9	12	3	5	8	26	17	12	12	316	Erysipelas	12
45	67	22	456	21	43	69	29	61	94	35	142	151	3325	Rheumatism	5
6	23	2	110	..	2	9	5	7	27	3	41	1	843	Neuralgic Affections	3
3	13	20	188	3	10	3	3	6	37	23	33	137	1860	Constitutional Syphilis	34
29	40	44	471	2	25	17	19	41	50	29	123	106	2871	Phthisis	392
18	10	71	..	2	6	8	..	15	9	7	1	..	443	Insanity	6
224	234	73	1468	158	217	197	143	245	275	118	494	445	9834	Bronchitis, Influenza, & Catarrh	429
1	24	1	80	5	6	7	15	4	35	8	20	34	757	Pleurisy and Pneumonia.....	79
30	9	85	689	1	25	24	16	39	61	33	48	535	3635	Skin Diseases .....	..
35	86	11	663	16	11	92	16	126	109	68	177	165	4343	Dyspepsia	3
1	..	2	..	..	1	..	..	25	50	..	..	2	139	Atrophy and Anæmia	33
375	436	410	4179	110	200	215	262	294	1815	168	1610	2084	33601	{ Accidents and diseases not classified	1586
1369	1569	1150	9408	492	888	877	814	1057	2981	694	2902	4214	74960	..... TOTAL.....	3182

is indebted for the annexed Returns.

- (14) Dr. Whitehead,

(15) „ J. Ogden Fletcher,

(16) Mr. J. Teale,

(17) Dr. T. M. Johnson,

(18)
- (19) Mr. J. O. Bradbury,

(20) Dr. Braddon,

(21) Mr. S. Woodcock,

(22) Dr. Alex. Wilson,

(23) Mr. H. M. Williamson,
- (24) Mr. Joseph Foster,

(25) „ J. T. Caldwell,

(26) „ J. V. L. Westmacott,

(27) „ John A. Eatock,

(28) „ George Clements.

Manchester and Salford Sanitary Association.

FIRST

QUARTERLY REPORT

OF THE

HEALTH

OF

MANCHESTER AND SALFORD,

FOR THE YEAR 1866 ;

*Compiled from the Weekly Returns of the Sanitary Association,
and presented to the Committee.*

MANCHESTER:

POWLSON & SONS, PRINTERS, BOW ST., JOHN DALTON STREET.
1866.

MANCHESTER AND SALFORD SANITARY ASSOCIATION.

Committee and Officers for the Year 1866.

President :

The Right Rev. The LORD BISHOP OF MANCHESTER.

Vice-Presidents :

The Worshipful the MAYOR of MANCHESTER.

The Worshipful the MAYOR of SALFORD.

The Very Rev. the DEAN of MANCHESTER.

MARQUIS of HARTINGTON.

Hon. ALGERNON EGERTON, M.P.

Sir E. ARMITAGE.

Sir JAS. BARDSLEY, M.D.

Rev. Canon RICHSON, M.A.

THOMAS BAZLEY, Esq., M.P.

WM. ENTWISTLE, Esq.

W. FAIRBAIRN, Esq., LL.D., F.R.S.

A. H. HEYWOOD, Esq.

JOHN CHEETHAM, Esq., M.P.

J. A. TURNER, Esq.

JOS. WHITWORTH, Esq., M.Inst.C.E.

Treasurer :

Mr. OLIVER HEYWOOD.

Chairman :

Mr. THOMAS TURNER, F.L.S., F.R.C.S.

Deputy-Chairman :

Dr. NOBLE, M.A.

Committee :

Mr. Councillor BOOTH.

Dr. F. CRACE CALVERT,
F.R.S.

Mr. C. E. CAWLEY,
M.Inst.C.E.

Mr. S. P. CALLENDER.

Dr. J. S. FLETCHER.

Mr. GEORGE GREAVES,
M.R.C.S.

Mr. WILLIAM HEATH,
M.R.C.S.

Mr. J. W. JACKSON.

Mr. Councillor KING.

Dr. LEDWARD.

Mr. T. MACKERETH,
F.R.A.S., M.B.M.S.

Mr. F. MARRIOTT.

Mr. J. W. MACLURE,
F.R.G.S., F.S.S.

Mr. THOMAS MELLOR,
F.R.C.S.

Mr. A. RANSOME, M.A.,
M.B., M.R.C.S.

Dr. ROSCOE, B.A.

Mr. WM. ROYSTON.

Dr. SAMELSON.

Dr. SIMPSON.

Dr. R. A. SMITH, F.R.S.

Mr. J. TEALE, M.R.C.S.

Mr. G. V. VERNON,
F.R.A.S., M.B.M.S.

Dr. M. A. EASON WIL-
KINSON.

Mr. W. J. WILLIAMS.

Rev. F. C. WOODHOUSE.

Honorary Secretaries :

Dr. MORGAN. | Mr. C. H. KNIGHT.

FIRST
QUARTERLY REPORT,
FOR THE YEAR 1866.

DISEASES.

The year 1866, so far as health is concerned, has not opened well; both the disease and death returns for the late quarter are highly unsatisfactory. Fever, under its more dreaded forms, was lamentably prevalent, and the proportion of deaths to cases unusually high.

In the course of the thirteen weeks which commenced on the 23rd of December and terminated on the 24th of March, the total number of new cases of disease and injuries occasioned by accidents, observed in the public practice of Manchester and Salford, amounted to 18,347. Although, in the three preceding and corresponding quarters of 1863, 1864, and 1865, the new cases were still more numerous, they were decidedly of a more trivial character, inasmuch as the proportion of deaths to cases was, in those quarters, considerably lower. Thus, in the March quarter of 1863, there were 716 deaths; in that of 1864, 884;

in that of 1865, 782; while in that just ended the number rose to 946.

The fever cases still continue the most serious item in the disease returns—they exceeded even the high total of the preceding quarter; at that time 1,530 cases were recorded, last quarter 1,665. Among these 1,665 patients there were 157 deaths, or 1 to every 10·6. It is difficult to estimate the proportion of these cases which proved examples of true Typhus, but probably not less than about 1,100, and it was among the latter almost exclusively that the deaths occurred. At the Manchester Workhouse 387 cases were admitted within the wards of the Fever Hospital, 69 of which, or 1 in every 5·6, terminated fatally. At the Chorlton Workhouse there were 152 cases and 30 deaths, or 1 in 5. At the Salford Workhouse 165 and 17, or 1 in 9·7; and, at the Royal Infirmary, 64 and 13, or 1 in 4·9. In the Poor Law Districts generally the fever death-rate (in public practice) was singularly low. This is satisfactory, as showing that the great majority of the worst cases were removed from their own homes to the Workhouses and Hospitals.

With the exception of Fever, Whooping-cough was the only one of the so-called zymotic diseases which prevailed to any unusual extent. In the course of the quarter 382 seizures were returned; among these patients there were 15 deaths, being at the rate of 1 to every 25 cases. The disease was almost exclusively confined to young children. One hundred of these patients applied for relief at the Salford Hospital, 84 at St. Mary's Hospital, and 43 at the Clinical Hospital; among the patients of the latter institution the disease proved unusually severe, 5 of the children succumbing to the attack. Three more deaths out of 19 cases were observed at the Ardwick Dispensary, and 3 out of 12 in St. Philip's district, Hulme.

Although 96 cases are assigned to Scarlet Fever the disease turned out unusually mild, the deaths resulting from it not exceeding 3, or 1 in every 32 cases. This proportion of deaths to cases contrasts strikingly with that recorded in some of our preceding quarterly reports; as, for example, in that for the last quarter of 1864, when 1 patient in every 6 succumbed to the disease.

It is satisfactory to find that Small-pox is far less general than in the early part of 1865. In the March quarter of that year there were 234 cases and 13 deaths, while last quarter the respective numbers were 48 and 4. Of the 48 cases 11 were attended by the medical officers of the Chorlton Dispensary, and 9 were admitted into the Manchester Infirmary.

Measles is another disease which has of late passed lightly over the town. Of the 35 cases which were scattered through the returns only 1 ended in death.

As might have been anticipated from the general mildness of the weather in the months of January and February, as compared with the corresponding months of the previous year, Bronchitis and Influenza proved far less prevalent than in 1865. At that time 3,491 new cases were returned, in the late quarter 3,064. Among the latter there were 167 deaths, or 1 in every 18 cases.

Pleurisy and Pneumonia, which resemble Bronchitis in the manner in which they are influenced by alternations of temperature, were not met with in as numerous instances as in many corresponding winter quarters. In the March quarter of 1865 there were 261 new cases, while in the late quarter the total did not exceed 198.

In addition to the Mortality Table appended to this Report, a Quarterly Disease Return is now added. It gives the aggre-

gate number of new cases of disease and injuries occasioned by accidents which occurred in the different Hospitals, Workhouses, Poor Law Districts, and Gaols, in the course of the thirteen weeks, from the 23rd of December to the 24th of March.

D E A T H S .

In the last quarter of 1865 the deaths registered in the eleven districts of the Sanitary Association amounted to 3,842. In the Report for those three months it was stated that the only preceding quarter in which the deaths approximated to this total was in that terminating in March, 1864, when 3,703 were entered on the registers. During the first thirteen weeks of this year, however, even these unprecedentedly high returns were considerably exceeded, the deaths rising to 4,002, or 36·8 in every 1,000 living. The births at the same time amounted to 4,317, or 315 more than the deaths, being in the proportion of 40 to every 1,000 of the population. This excess of births over deaths (generally spoken of as the natural increase of the population) is unusually small, as will readily be seen by a reference to some of the preceding and corresponding quarters of former years. In the March quarter of 1862 the births exceeded the deaths by 532, in 1863 by 1,062, in 1864 by 644, and in 1865 by 673.

In the course of the late quarter the deaths, relatively to population, were most numerous in Salford. In the Regent Road and Greengate Districts, situated in this borough, no fewer than 782 persons died during the thirteen weeks, being at the rate of 39·2 to every 1,000 of the population. In the

preceding quarter the death-rate was not much lower, being at that time 38·2. It is frightful to contemplate the unhealthy conditions of life which surround vast multitudes of the poorer inhabitants of many of the over-populated districts of the town ; this is well seen in the character of the diseases from which they suffer. Thus, in Salford, where the death-rate from all causes was the highest recorded, the deaths (74) from fever surpassed those in any other quarter of the town, with the exception of the Market Street district, where the fever death-rate is unduly augmented by the returns of the Manchester Workhouse and those of the Royal Infirmary.

After Salford the death-rates were the highest in the London Road and Deansgate Districts. These rates were expressed by 37 in the 1,000; at the same time the birth-rates did not exceed 33·6. It is thus apparent that in these two quarters of the town the deaths very considerably exceeded the births. Here, likewise, fever was very general, proving fatal to 41 persons. The Ancoats District follows the London Road and Deansgate, with a death-rate of 35·2. In this part of the town the mortality arising from diseases connected with the respiratory organs was excessive ; out of a total of 507 deaths, 222, or upwards of 43 per cent. are assigned to this cause. The extreme prevalence of diseases of this order in Ancoats, as compared with other parts of the town, have been frequently referred to in these reports. Probably it may not unreasonably be attributed to the excessive consumption of coal which is constantly going on in this district. The Ancoats death-rate is followed by that of Hulme, where 609 persons died in the course of the quarter, being at the rate of 32 to the 1,000. Whooping-cough here carried off more children than in any other quarter of the town. The district which furnishes the most favourable bill of health

is Chorlton, though even here the deaths were as high as 27·2 in the 1,000. The fever death-rate was lower here than in any of the remaining districts; and, with the single exception of Whooping-cough, all the zymotic diseases turned out unusually mild.

Of the 4,002 deaths 1,670, or about 41 per cent. occurred in children under five years of age. In some of the districts the per centage was very much higher. In the Pendleton district it rose to 56 per cent., and in the Hulme to 50 per cent. On the other hand, in the Market Street district, it did not exceed 17 per cent.; this, however, is owing in a great measure to the number of adults who are removed from all parts of the town to the Workhouse and Infirmary: many of these persons suffering from fatal diseases, are, in the event of their death, registered in a district to which they do not strictly belong.

JOHN ED. MORGAN, M.D., M.A., OXON.,
Hon. Sec. Sanitary Association.

MANCHESTER AND SALFORD

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC New Cases of Disease coming under Treatment

	MANCHESTER.															
Area in Statute Acres	Manchester Township 1,645															
Population in 1861	,, ,, 185,050															
DISEASES.	POOR LAW DISTRICTS.							PUBLIC INSTITUTIONS.								
	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts	Workhouse	ROYAL INFIRMARY.					CHILDREN		City Gaol
									In-patients	Out-patients	District I.	District II.	District III.	St. Mary's Hospital	Clinical Hospital	
	1	2	3	4	5	6		7	8	9	10	11	12	13	14	15
Small-pox .....	..	1	2	..	..	3	6	2	9	..	..	4	3	1	..	..
Chicken-pox	2	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Measles .....	..	..	..	4	..	1	5	..	1	2	..	3	1	1	1	..
Scarlatina .....	..	2	2	..	..	3	7	2	2	3	..	10	8	3	4	..
Diphtheria .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	2	3	5	..	..	7	17	..	..	16	..	3	1	84	43	..
Croup .....	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Diarrhœa.....	2	10	3	9	2	7	33	33	..	14	1	..	4	47	38	28
Dysentery .....	..	1	..	..	1	1	3	34	1	..	..	1	..	4	..	..
Continued Fever	78	6	43	11	36	47	221	387	64	7	21	36	59	50	..	3
Erysipelas	3	1	..	..	2	1	7	14	1	2	6	..	6	1	..	..
Rheumatism	4	8	8	11	5	4	40	197	28	183	10	25	37	7	16	31
Neuralgic Affections .....	..	..	1	1	..	..	2	5	30	47	7	2	9	4	22	10
Constitutional Syphilis	2	1	1	..	1	1	6	46	1	163	4	7	5	4	15	23
Phthisis	4	2	5	8	6	3	28	91	1	256	18	25	29	11	42	2
Insanity	5	1	4	1	..	1	12	28	..	1	3	..	..	..	..	..
Bronchitis, Influenza & Catarrh	81	70	24	44	44	106	369	330	10	434	32	52	82	51	129	80
Pleurisy and Pneumonia	5	2	3	5	4	..	19	29	4	37	8	12	9	3	7	..
Skin Diseases	9	4	4	3	1	3	24	83	..	119	3	..	1	30	122	32
Dyspepsia	3	2	..	2	2	1	10	219	3	275	..	2	8	19	78	33
Atrophy and Anæmia.....	..	..	..	..	4	1	5	..	..	..	..	..	6	..	..	..
Accidents and diseases not classified	150	52	117	86	58	144	607	424	596	2534	79	86	98	484	125	54
TOTAL	350	166	222	185	166	334	1423	1924	751	4093	192	268	366	805	642	296

Medical Officers to whom the Association

(1) Mr. R. M. Mann,
(2) „ J. Broadbent,
(3) „ Edward Meacham,
(4) Dr. Braddon,

(5) Mr. Octavius Dean,
(6) Dr. Ledward,
(7) Mr. T. J. Webster,
(8) Dr. George Reed,

(9) } Mr. Thomas Leeds,
(10) } „ W. H. Sutcliffe,
(11) } „ Theodore Fennell,
(12) } „
(13) } „ H. Runcorn,

SANITARY ASSOCIATION.

INSTITUTIONS OF MANCHESTER AND ADJOINING DISTRICTS.

during the Quarter ending the 24th of March, 1866.

SALFORD.					HULME.			CHORLTON.		ARDWICK.	PENDLETON AND PENDLEBURY.					DEATHS.
..... 1,329 .....					..... 477 .....			.. 646 ..		..508..	..... 2,650 .....			.....Area in Statute Acres.	
..... 70,967 .. ...					.. 68,209.....			..44,850..		21,739	..... 24,448 .....			.....Population in 1861.	
POOR LAW DISTRICT.		PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.			Poor Law District	Dispensary	Poor Law District	Ardwick & Ancoats Dispensary	Chorlton Union Workhouse	Total.	DISEASES.		
Greengate	Regent Road	Workhouse	Dispensary	New Bailey	St. George's	Medlock	St. Philip's									
16	17	18	19	20	21	22	23	24	25	26	27	28				
..	..	5	2	..	..	..	1	..	11	2	2	..	48	Small-pox	4
..	..	..	..	..	..	..	..	..	..	..	..	..	2	Chicken-pox .....	..
..	..	1	4	..	9	2	3	1	..	..	..	1	35	Measles	1
..	1	1	5	..	4	7	..	5	15	..	2	17	96	Scarlatina	3	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	Diphtheria .....	..
..	4	2	100	..	13	11	12	7	27	10	19	13	382	Whooping-cough	15	
..	..	..	..	..	1	1	..	1	1	..	..	..	5	Croup	1
9	4	1	43	27	4	5	9	2	14	18	..	17	351	Diarrhoea ..	8	
4	3	..	..	..	..	..	1	3	..	1	..	..	55	Dysentery	1
42	104	165	144	..	64	30	64	11	6	6	29	152	1665	Continued Fever	157	
1	2	2	23	2	1	1	1	3	8	7	1	4	93	Erysipelas	4	
10	21	2	99	9	14	15	7	16	24	16	35	25	867	Rheumatism .....	..
..	5	..	33	..	1	2	2	4	8	..	..	..	193	Neuralgic Affections .....	..
2	6	14	65	..	2	..	2	..	11	6	14	41	437	Constitutional Syphilis	9	
3	6	3	148	..	6	5	4	12	14	10	32	22	768	Phthisis	110	
5	2	25	..	2	2	3	..	7	3	2	..	..	95	Insanity .....	..
82	70	27	510	49	87	79	67	95	102	32	201	94	3064	Bronchitis, Influenza, & Catarrh	167	
1	7	..	24	2	1	4	6	1	16	3	2	3	198	Pleurisy and Pneumonia.....	19	
9	4	36	122	1	10	7	3	18	17	7	10	149	807	Skin Diseases .....	..
6	20	2	149	2	2	26	3	39	32	20	50	19	1017	Dyspepsia	1	
..	..	..	..	..	..	..	..	4	13	..	..	..	28	Atrophy and Anæmia	8
105	131	147	817	28	47	66	69	78	452	46	513	555	8141	{ Accidents and diseases not } { classified	438	
279	390	433	2288	122	268	264	254	307	774	186	910	1112	18346	..... TOTAL	946

is indebted for the annexed Returns.

(14) Dr. Whitehead,
 (15) „ J. Ogden Fletcher,
 (16) Mr. J. Teale,
 (17) Dr. T. M. Johnson,
 (18) Mr. M. O. Larmuth,

(19) Mr. J. O. Bradbury,
 (20) „ W. B. Stott,
 (21) „ John Smith,
 (22) Dr. Alex. Wilson,
 (23) Mr. H. M. Williamson,

(24) Mr. Joseph Foster,
 (25) „ John Rayner,
 (26) „ J. V. L. Westmacott,
 (27) „ John A. Eatock,
 (28) „ J. Watson.

RETURN OF BIRTHS AND DEATHS FOR

COMPILED BY

TOWNSHIP OF	POPULATION 1861.	<i>Deaths for the Quarters ending March</i>				
		1866	1865	1864	1863	1862
Manchester	185,410	1996	1810	1810	1642	1867
Salford	71,002	720	605	653	523	631
Pendleton and Pendlebury. }	24,448	189	169	165	136	150
Chorlton	44,795	316	279	292	272	231
Hulme and Moss Side	71,128	609	496	593	470	440
Ardwick	21,746	172	136	190	176	194
TOTAL.....	418,529	4002	3495	3703	3219	3513

It has been thought advisable that the mortality return be remodelled; the deaths from the several causes, hitherto given separately, are now included in the general grouping. For more detailed information, reference can be made to the Weekly Returns. Moreover, the rate of death to population is omitted, as it is impossible to ascertain with anything like accuracy the variation of population from year to year. To assume that the rate of increase will be the same as it was during the ten years preceding the last census will certainly, in this locality, lead to error. An illustration in proof may be supplied by the fact that the increase of population in the township of Manchester at the census of 1851, from the previous one of 1841, was about 15 per

QUARTERS ENDING MARCH 1862 TO 1866.

MR. WILLIAM ROYSTON.

<i>Births for the Quarters ending</i> <i>March</i>					POPULATION	TOWNSHIP
1866	1865	1864	1863	1862	1861	OF
1821	1755	1747	1851	1822	185,410	..... Manchester
782	761	790	738	715	71,002	..... Salford
263	238	279	267	258	24,448	..... { Pendleton and Pendlebury
377	411	387	356	409	44,795	..... Chorlton
765	744	832	793	701	71,128	Hulme and Moss Side
309	259	312	276	248	21,746	..... Ardwick
4317	4168	4347	4281	4153	418,529	..... TOTAL

ent., but at the census of 1861 the population had decreased nearly 1 per cent.; and again, in Hulme, at the census of 1841, the increase from 1831 was about 200 per cent., and at that of 1851 it was about 100 per cent., but at that of 1861 the increase was only about 30 per cent. The plan of estimating a certain number of persons for each house built is also fallacious, as the density of population varies in towns considerably with the circumstances of the times. The method adopted in previous tables of adding the excess of births over deaths cannot yield accurate results, because it does not include the effects of emigration and immigration.

Manchester and Salford Sanitary Association.

S E C O N D

Q U A R T E R L Y R E P O R T

O F T H E

H E A L T H

O F

M A N C H E S T E R A N D S A L F O R D ,

F O R T H E Y E A R 1866 ;

*Compiled from the Weekly Returns of the Sanitary Association,
and presented to the Committee.*

M A N C H E S T E R :

P O W L S O N & S O N S , P R I N T E R S , B O W S T . , J O H N D A L T O N S T .
1866.

MANCHESTER AND SALFORD SANITARY ASSOCIATION.

Committee and Officers for the Year 1866.

President :

The Right Rev. The LORD BISHOP OF MANCHESTER.

Vice-Presidents :

The Worshipful the MAYOR of MANCHESTER.

The Worshipful the MAYOR of SALFORD.

The Very Rev. the DEAN of MANCHESTER.

MARQUIS of HARTINGTON.

Hon. ALGERNON EGERTON, M.P.

Sir E. ARMITAGE.

Sir JAS. BARDSLEY, M.D.

Rev. Canon RICHSON, M.A.

THOMAS BAZLEY, Esq., M.P.

W. FAIRBAIRN, Esq., LL.D., F.R.S.

A. H. HEYWOOD, Esq.

JOHN CHEETHAM, Esq., M.P.

J. A. TURNER, Esq.

JOS. WHITWORTH, Esq., M.Inst.C.E.

Treasurer :

Mr. OLIVER HEYWOOD.

Chairman :

Mr. THOMAS TURNER, F.L.S., F.R.C.S.

Deputy-Chairman :

Dr. NOBLE, M.A.

Committee :

Mr. Councillor BOOTH.

Dr. F. CRACE CALVERT,
F.R.S.

Mr. C. E. CAWLEY,
M.Inst.C.E.

Mr. S. P. CALLENDER.

Dr. J. S. FLETCHER.

Mr. GEORGE GREAVES,
M.R.C.S.

Mr. WILLIAM HEATH,
M.R.C.S.

Mr. J. W. JACKSON.

Mr. Councillor KING.

Dr. LEDWARD.

Mr. T. MACKERETH,
F.R.A.S., M.B.M.S.

Mr. F. MARRIOTT.

Mr. J. W. MACLURE,
F.R.G.S., F.S.S.

Mr. THOMAS MELLOR,
F.R.C.S.

Mr. A. RANSOME, M.A.,
M.B., M.R.C.S.

Dr. ROSCOE, B.A.

Mr. WM. ROYSTON.

Dr. SAMELSON.

Dr. SIMPSON.

Dr. R. A. SMITH, F.R.S.

Mr. J. TEALE, M.R.C.S.

Mr. G. V. VERNON,
F.R.A.S., M.B.M.S.

Dr. M. A. EASON WIL-
KINSON.

Mr. W. J. WILLIAMS.

Rev. F. C. WOODHOUSE.

Honorary Secretaries :

Dr. MORGAN.

|

Mr. C. H. KNIGHT.

Communications for the Committee may be addressed to—

THOMAS TURNER, Esq., Chairman,
77, Mosley Street.

Dr. NOBLE, Deputy Chairman,
Piccadilly.

OLIVER HEYWOOD, Esq., Treasurer,
St. Ann's Street.

The Honorary Secretaries, { Dr. MORGAN, 1, St. Peter's Square.
C. H. KNIGHT, Esq., 75, Mosley Street.

Or to

Mr. C. G. CARTLEDGE, Secretary,
At the Offices of the Association, 33, Pall Mall,
(Near to the Bank of England.)

S E C O N D
Q U A R T E R L Y R E P O R T,
F O R T H E Y E A R 1 8 6 6.

— o —
D I S E A S E S.

THE second quarter of the current year terminated on Saturday, the 23rd of June: it contained exactly thirteen weeks. Although the total number of new cases of disease and injuries occasioned by accidents, observed in the course of public practice, were less numerous than in the three preceding and corresponding quarters of 1863, 1864, and 1865, nevertheless the proportion of deaths to cases was unusually high. It may be inferred, therefore, that the prevailing diseases were, as a rule, of a somewhat formidable type.

The number of new cases of disease returned in the quarter amounted to 16,973, and the deaths among patients of the same class to 795; it would thus appear that about 1 case in every 22 terminated fatally. In the June quarter of 1865 the proportion of deaths to cases did not exceed 1 in 27.

The most unsatisfactory feature in the present report will be found in the wide-spread prevalence of Continued Fever. In the course of public practice alone 945 cases came under the observation of the medical officers connected with the Hospitals and Poor Law Unions. Of these cases 115 proved fatal, being in the proportion of 1 death to every 8·2 cases. At the Manchester Workhouse 182 patients were admitted into the fever wards, at the Chorlton 73, at the Salford 61, and at the Royal

Infirmary 53. Inasmuch as the severest cases are usually removed to these institutions, the proportion of deaths to cases among these patients is naturally very high. Out of the 66 cases admitted into the Salford Workhouse 25, or 1 in every 2·6, terminated fatally; at the Royal Infirmary the proportion of deaths to recoveries was 1 in 3·7; and at both the Manchester and Salford Workhouses it was 1 in 4·5. From the returns of the medical officers of the different Poor Law Districts it would appear that the greatest number of cases originated in Hulme; in St. George's District, situated in this quarter of the town, Mr. John Smith attended 48 fever patients, while 46 came under the care of Mr. Williamson, in the St. Philip's District. In the worst parts of Salford, likewise, numerous outbreaks were observed, no fewer than 40 seizures being reported by Mr. Teale; while in St. Michael's District, situated in Angel Meadow, 41 cases were seen by Dr. Ledward. That Fever should prove especially virulent in these quarters of the town is nothing more than might have been anticipated, the overcrowding of the houses and the general want of cleanliness on the part of the people being alike favourable to its rise and diffusion. In these localities, likewise, cellar dwellings and back-to-back houses are still lamentably prevalent.

In the late quarter 36 cases of Small-pox were returned, while in only one instance the disease proved fatal. In the corresponding quarter of 1865 there were 172 cases and 12 deaths. Since that time, however, the disease has steadily though slowly declined; at the same time the proportion of deaths to cases clearly indicates that the form the malady has assumed is singularly mild and tractable.

Scarlet Fever, another of the exanthematous fevers which, during the year 1863 and early part of 1864, raged with all the

virulence of an epidemic, has now subsided into those narrowed proportions which experience has shown may be looked upon as well-nigh normal—the disease being never altogether absent from our great cities. In the first quarter of the current year there were 96 cases and 3 deaths, while in that just ended the numbers were 97 and 4—being in the proportion of 1 death to every 24 cases. Of the 97 patients 22 were attended by the medical officers of the Salford Hospital, and 14 by those of the Chorlton Dispensary.

Measles, another disease of the same order, which, among the poorer classes, frequently carries off a considerable number of young children, has for several quarters proved unusually mild; during the thirteen weeks the new cases did not exceed 51, while in no single instance did a fatal result supervene.

In the March quarter the Whooping-cough returns were highly unsatisfactory, 382 poor children having suffered from the disease. As the season advanced and the weather became warmer a marked improvement was observable under this column, the total number of seizures not exceeding 156, while the deaths also fell from 15 to 7. Of the 156 cases 48 were seen at the Salford Hospital and 38 at St. Mary's Hospital.

Bronchitis and kindred affections of the respiratory organs contributed 2,262 new cases to the report. In the corresponding quarter of 1865 these diseases proved somewhat less prevalent, the seizures at that time amounting to 2,106. The proportion of deaths to cases (1 in 24) recorded in the late quarter is considerably above the average observed during the spring months.

The Diarrhoea return nearly exactly corresponds with that of the second quarter of 1865; at that time the seizures amounted to 468 and the deaths to 9. During the last three months the respective numbers were 456 and 5. A considerable number of

the cases occurred among the young, as is shown by the fact that 55 of the patients applied for relief at the Clinical Hospital and 38 at the Children's Hospital.

Only 3 cases of Diphtheria were observed in the course of the quarter, 2 of which proved fatal.

D E A T H S .

Mr. Royston's Mortality Table will be found appended to this Report. In that table the deaths registered in the late quarter, and in the corresponding quarters of the four preceding years, are tabulated in parallel columns.

The comparison is not favourable to the present year,—the deaths in the course of the thirteen weeks amounting to 3,499, or 365 more than in any other June quarter contained in the list.

Of the 3,499 deaths, 996 are ascribed to diseases connected with the respiratory organs ; in the two preceding June quarters the numbers did not exceed 658 and 789.

At the same time the Fever return was very high, 265 persons falling victims to the various forms of the disease.

Whooping-cough was another disorder which assumed an epidemic degree of intensity, 164 deaths being ascribed to its ravages.

The most satisfactory feature in the table is the continued decrease under Small-pox, only 5 fatal cases of this disorder being registered in the town.

JOHN ED. MORGAN, M.D., M.A., OXON.,
Hon. Sec. Sanitary Association.



MANCHESTER AND SALFORD

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC New Cases of Disease coming under Treatment

MANCHESTER.																
Area in Statute Acres	Manchester Township 1,645															
Population in 1861	" " 185,050															
DISEASES.	POOR LAW DISTRICTS.							PUBLIC INSTITUTIONS.								
	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts	Workhouse	ROYAL INFIRMARY.					CHILDREN		City Gaol
	1	2	3	4	5	6		7	In-patients	Out-patients	District I.	District II.	District III.	St. Mary's Hospital	Clinical Hospital	
Small-pox .....	..	1	1	3	..	..	5	2	6	..	..	3	1	2	2	..
Chicken-pox .....	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..
Measles	7	1	..	1	1	1	11	..	..	..	1	..	..	8	2	..
Scarlatina	3	1	..	1	..	2	7	2	7	..	..	2	7	1	5	..
Diphtheria .....	..	..	..	..	..	..	..	..	1	3	..	..	..	..	..	..
Whooping-cough	3	1	..	1	..	1	6	..	..	..	..	..	1	38	18	..
Croup .....	..	..	..	1	..	..	1	..	..	..	..	..	..	..	1	..
Diarrhœa.....	..	3	..	5	4	9	21	56	..	33	1	..	3	38	55	33
Dysentery	1	..	2	2	2	1	8	..	..	..	..	..	..	2	2	..
Continued Fever	34	17	35	4	22	41	153	182	53	4	3	27	34	50	1	..
Erysipelas	1	..	..	2	2	..	5	12	1	1	..	5	4	..	..	2
Rheumatism	10	8	1	6	3	8	36	179	22	170	13	11	17	4	26	15
Neuralgic Affections .....	..	..	3	..	..	1	4	22	29	49	4	..	7	1	42	27
Constitutional Syphilis .....	..	2	..	..	..	1	3	66	..	227	3	..	2	8	18	29
Phthisis	3	8	4	10	9	6	40	65	6	254	18	23	21	13	23	13
Insanity	2	7	7	1	..	2	19	81	..	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	38	42	14	28	32	56	210	279	11	363	34	38	55	42	168	63
Pleurisy and Pneumonia	7	4	1	7	1	1	21	19	9	28	1	8	7	2	13	..
Skin Diseases	8	..	6	7	..	3	24	103	1	139	..	..	1	48	202	33
Dyspepsia	3	8	1	2	7	..	21	207	3	297	3	1	9	28	152	26
Atrophy and Anæmia.....	..	..	1	..	3	1	5	2	..	..	..	..	..	..	..	..
Accidents and diseases not classified	173	51	141	87	36	132	620	382	557	2905	60	57	85	485	228	27
TOTAL	293	154	217	168	122	266	1220	1659	706	4473	142	175	254	770	959	268

Medical Officers to whom the Association

(1) *Mr. R. M. Mann,*
 (2) *„ J. Broadbent,*
 (3) *„ Edward Meacham,*
 (4) *Dr. Braddon,*

(5) *Mr. Octavius Dean,*
 (6) *Dr. Ledward,*
 (7) *Mr. T. J. Webster,*
 (8) *Dr. George Reed,*

(9) *Mr. Theodore Fennell,*
 (10) *„ W. H. Sutcliffe,*
 (11) *„ W. J. Tattersall,*
 (12) *„ „*
 (13) *„ H. Runcorn,*

SANITARY ASSOCIATION.

INSTITUTIONS OF MANCHESTER AND ADJOINING DISTRICTS.

during the Quarter ending the 23rd of June, 1866.

SALFORD.					HULME.			CHORLTON.		ARDWICK.		PENDLETON AND PENDLEBURY.					DEATHS.
..... 1,329 .....					..... 477 .....			... 646 ...		..508..		..... 2,650 .....			.....Area in Statute Acres.	
..... 70,967 .....					..... 68,209.....			..44,850..		21,739		..... 24,448 .....			.....Population in 1861.	
POOR LAW DISTRICT.		PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.			Poor Law District	Dispensary	Poor Law District	Ardwick & Ancoats Dispensary	Chorlton Union Workhouse	Total.	DISEASES.			
Greengate	Regent Road	Workhouse	Dispensary	New Bailey	St. George's	Medlock	St. Philip's										
16	17	18	19	20	21	22	23	24	25	26	27	28					
1	..	1	3	2	..	1	..	1	4	2	..	..	36	Small-pox		1
..	..	..	..	..	..	..	..	..	1	..	..	2	5	Chicken-pox .....	..	..
..	..	..	20	..	2	1	1	1	1	1	2	..	51	Measles .....	..	..
3	..	..	22	..	4	2	5	7	14	2	4	3	97	Scarlatina .....	..	..
..	..	..	1	..	..	..	..	..	..	1	..	..	6	Diphtheria	4	..
2	4	..	48	..	1	6	7	4	6	7	3	2	153	Whooping-cough	2	..	
..	..	..	1	..	..	..	..	..	1	2	..	1	7	Croup	7	..
6	5	..	63	35	3	5	7	3	31	14	..	35	427	Diarrhoea ..	1	..	
1	..	1	1	..	..	..	1	5	..	5	9	..	35	Dysentery	5	..
0	26	66	71	..	48	11	46	18	10	19	10	73	945	Continued Fever	115	..	
1	3	2	5	6	3	1	2	3	6	6	2	1	71	Erysipelas	3	..	
1	21	9	124	8	13	25	5	13	26	6	34	28	816	Rheumatism	2	..	
1	9	..	37	..	..	3	..	..	6	2	5	..	248	Neuralgic Affections	2	..
..	4	4	51	1	..	2	..	2	10	12	5	39	486	Constitutional Syphilis	8	..	
7	20	8	140	1	6	2	6	9	13	9	26	22	745	Phthisis	110	..	
4	3	21	..	..	..	4	..	2	2	3	..	..	139	Insanity	5	..
8	50	8	358	51	46	48	23	50	56	20	114	127	2262	Bronchitis, Influenza, & Catarrh	94	..	
..	8	..	12	1	2	1	5	3	5	4	3	12	164	Pleurisy and Pneumonia.....	19	..	
3	2	8	131	..	6	11	5	9	20	12	2	119	879	Skin Diseases .....	..	..
9	19	1	160	2	6	33	6	33	35	12	25	51	1139	Dyspepsia .....	..	..
1	..	..	..	..	..	..	..	3	12	..	..	..	23	Atrophy and Anæmia	8	..
9	77	83	946	28	49	55	57	66	458	41	411	453	8219	{ Accidents and diseases not classified	409	..	
7	251	212	2194	135	189	211	176	232	717	180	655	968	16973	..... TOTAL		795

is indebted for the annexed Returns.

- (14) Dr. Whitehead,
- (15) „ J. Ogden Fletcher,
- (16) Mr. J. Teale,
- (17) Dr. T. M. Johnson,
- (18) Mr. George Clements,

- (19) Mr. J. O. Bradbury,
- (20) Dr. Braddon,
- (21) Mr. John Smith,
- (22) Dr. Alex. Wilson,
- (23) Mr. H. M. Williamson,

- (24) Mr. Joseph Foster,
- (25) „ John Rayner,
- (26) „ J. V. L. Westmacott,
- (27) „ John A. Eatock,
- (28) „ S. Woodcock.

RETURN OF BIRTHS AND DEATHS FOR

COMPILED BY

TOWNSHIP OF	POPULATION 1861.	<i>Deaths for the Quarters ending June</i>				
		1866	1865	1864	1863	1862
Manchester	185,410	1637	1636	1331	1599	1327
Salford	71,002	680	506	501	466	557
Pendleton and Pendlebury. }	24,448	172	131	127	149	132
Chorlton	44,795	287	253	292	268	196
Hulme and Moss Side	71,128	528	448	438	482	418
Ardwick	21,746	195	150	150	170	108
TOTAL.....	418,529	3499	3124	2839	3134	2738

It has been thought advisable that the mortality return be remodelled; the deaths from the several causes, hitherto given separately, are now included in the general grouping. For more detailed information, reference can be made to the Weekly Returns. Moreover, the rate of death to population is omitted, as it is impossible to ascertain with anything like accuracy the variation of population from year to year. To assume that the rate of increase will be the same as it was during the ten years preceding the last census will certainly, in this locality, lead to error. An illustration in proof may be supplied by the fact that the increase of population in the township of Manchester at the census of 1851, from the previous one of 1841, was about 15 per

QUARTERS ENDING JUNE 1862 TO 1866.

MR. WILLIAM ROYSTON.

<i>Births for the Quarters ending</i>					POPULATION	TOWNSHIP OF
<i>June</i>						
1866	1865	1864	1863	1862	1861	
1672	1715	1789	1842	1824	185,410	..... Manchester
772	771	804	764	906	71,002	..... Salford
245	252	273	257	247	24,448	..... { Pendleton and Pendlebury
430	404	381	421	381	44,795	..... Chorlton
791	725	733	798	804	71,128	Hulme and Moss Side
285	291	292	246	233	21,746	..... Ardwick
4195	4158	4272	4328	4395	418,529	..... TOTAL

ent., but at the census of 1861 the population had decreased nearly 1 per cent.; and again, in Hulme, at the census of 1841, the increase from 1831 was about 200 per cent., and at that of 1851 it was about 100 per cent., but at that of 1861 the increase was only about 30 per cent. The plan of estimating a certain number of persons for each house built is also fallacious, as the density of population varies in towns considerably with the circumstances of the times. The method adopted in previous tables of adding the excess of births over deaths cannot yield accurate results, because it does not include the effects of emigration and immigration.

Manchester and Salford Sanitary Association.

THIRD

QUARTERLY REPORT

OF THE

HEALTH

OF

MANCHESTER AND SALFORD,

FOR THE YEAR 1866 ;

*Compiled from the Weekly Returns of the Sanitary Association,
and presented to the Committee.*

MANCHESTER:

POWLSON & SONS, PRINTERS, BOW ST., JOHN DALTON ST.
1866.

MANCHESTER AND SALFORD SANITARY ASSOCIATION.

Committee and Officers for the Year 1866.

President :

The Right Rev. The LORD BISHOP OF MANCHESTER.

Vice-Presidents :

The Worshipful the MAYOR of MANCHESTER.

The Worshipful the MAYOR of SALFORD.

The Very Rev. the DEAN of MANCHESTER.

MARQUIS of HARTINGTON.

Hon. ALGERNON EGERTON, M.P.

Sir E. ARMITAGE.

Sir JAS. BARDSLEY, M.D.

Rev. Canon RICHSON, M.A.

THOMAS BAZLEY, Esq., M.P.

W. FAIRBAIRN, Esq., LL.D., F.R.S.

A. H. HEYWOOD, Esq.

JOHN CHEETHAM, Esq., M.P.

J. A. TURNER, Esq.

JOS. WHITWORTH, Esq., M.Inst.C.E.

Treasurer :

Mr. OLIVER HEYWOOD.

Chairman :

Mr. THOMAS TURNER, F.L.S., F.R.C.S.

Deputy-Chairman :

Dr. NOBLE, M.A.

Committee :

Mr. Councillor BOOTH.

Dr. F. CRACE CALVERT,
F.R.S.

Mr. C. E. CAWLEY,
M.Inst.C.E.

Mr. S. P. CALLENDER.

Dr. J. S. FLETCHER.

Mr. GEORGE GREAVES,
M.R.C.S.

Mr. WILLIAM HEATH,
M.R.C.S.

Mr. J. W. JACKSON.

Mr. Councillor KING.

Dr. LEDWARD.

Mr. T. MACKERETH,
F.R.A.S., M.B.M.S.

Mr. F. MARRIOTT.

Mr. J. W. MACLURE,
F.R.G.S., F.S.S.

Mr. THOMAS MELLOR,
F.R.C.S.

Mr. A. RANSOME, M.A.,
M.B., M.R.C.S.

Dr. ROSCOE, B.A.

Mr. WM. ROYSTON.

Dr. SAMELSON.

Dr. SIMPSON.

Dr. R. A. SMITH, F.R.S.

Mr. J. TEALE, M.R.C.S.

Mr. G. V. VERNON,
F.R.A.S., M.B.M.S.

Dr. M. A. EASON WIL-
KINSON.

Mr. W. J. WILLIAMS.

Rev. F. C. WOODHOUSE.

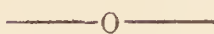
Honorary Secretaries :

Dr. MORGAN.

|

Mr. C. H. KNIGHT.

THIRD
QUARTERLY REPORT,
FOR THE YEAR 1866.



DISEASES.

THE third quarter of the current year, containing exactly thirteen weeks, extended from the 23rd of June to the 22nd of September. It was characterised by a wide-spread prevalence of disease. The statistics bearing on the subject are contained in the Weekly Returns of the Association.

The total number of new cases of disease and injuries occasioned by accidents, observed in the course of public practice in the Hospitals, the Workhouses, and Poor Law Districts of the town, amounted to 20,505. In the two preceding and corresponding quarters of 1864 and 1865 the respective numbers were 17,121 and 18,423.

Of the 20,505 new cases of disease returned in our tables 696, or 1 in every 29, terminated fatally. In the third quarter of 1865 the proportion of deaths to cases was 1 in 27, in 1864 1 in 33, and in 1863 1 in 32.

The Diarrhœa return gives a total of 4,720 seizures. In the corresponding quarters of the three preceding years the numbers were 2,075, 1,283, and 1,874; the aggregate total for the three years being 5,232, or only 512 more than were recorded during the last three months. But though the cases were numerous the intensity of the disease—in other words the proportion of deaths to seizures—was by no means excessive, the deaths registered in public practice not exceeding 61, being at the rate of 1 death to every 77 cases. In the autumn of 1865 the Diarrhœa death-rate was 1 in 19, and in 1864 1 in 29.

There is one question connected with the prevalence of Diarrhœa during the late quarter which needs some comment in a report bearing on the public health. We refer to the apparently capricious manner in which it was lighted into activity in certain districts, while others, certainly not more favourably situated in respect to their sanitary requirements, escaped with comparative impunity. Thus, for example, in St. George's District, Hulme—a quarter of the town which has frequently been devastated by Fever—only 61 seizures from Diarrhœa were recorded; while in St. Peter's District Mr. Mann reports the extraordinary number of 1,887 new cases, or about six times the number observed in any other district of the town. From enquiries instituted at the time, it would appear that these heavy returns were rather owing to the active measures which were adopted for the discovery and treatment of the disease, than to any very excessive frequency in the number of seizures. A careful examination of the Diarrhœa returns shows that the great majority of the poor patients did not wait until they could obtain a recommendation to a Hospital or Dispensary, but applied directly for relief to the district medical officers. Thus, in the Manchester Poor Law Districts, 2,711

cases were submitted to treatment, while the applications at the Infirmary did not exceed 145 ; so, too, in two of the Salford Poor Law Districts—those of Greengate and Regent Road—613 seizures were recorded, while only 168 were treated at the Salford Hospital.

During the whole of the quarter Continued Fever, under some one of its forms, was lamentably prevalent, no fewer than 992 new cases being recorded. Among these patients there were 74 deaths, the proportion of deaths to cases being 1 in 13. At those public institutions where wards are specially set aside for the treatment of fever the death-rate was very much higher ; this is owing to the more malignant character of the cases which are admitted. At the Royal Infirmary there were 74 cases and 14 deaths, or 1 in every 5·2 ; at the Manchester Workhouse the numbers were 209 and 34, or 1 in 6·1 ; and at the Chorlton Workhouse 49 and 7, or 1 in 7. On turning to the particular districts in which Fever originated we find that the heaviest return (52) is furnished by Dr. Ledward, from the St. Michael's District, a quarter of the town in which Angel Meadow is situated. Next follows the St. Jude's District, where Mr. Dean attended 50 cases ; while this is succeeded by District III. of the Royal Infirmary, and by the St. Andrew's and St. Peter's Districts. The heavy Fever returns of the late quarter are well calculated to awaken a feeling of anxiety for the sufferings of the poor during the coming winter. The cold months of the year are pre-eminently favourable to the spread of Fever, for it is then that the windows and doors of the cottages are kept closed, while the inmates are huddled together in the stifling atmosphere of their overcrowded apartments.

Only 5 new cases of Small-pox were returned during the thirteen weeks, 3 of which were attended by the medical officers

of the Salford Hospital, 1 was admitted as an in-patient of the Royal Infirmary, and 1 came under the care of Mr. Dean, in the St. Jude's District. In the corresponding quarter of 1863 263 persons experienced attacks of this disease. From that time, however, the returns have exhibited a gradual though decided improvement.

In the course of the quarter 108 new cases of Measles were recorded, while the deaths under this column amounted to 7, or 1 in every 15 cases. The disease was almost entirely confined to Chorlton, 31 cases being admitted into the Chorlton Union Workhouse, while 27 were treated by the medical officers of the Chorlton Dispensary. In the corresponding quarter of 1864 and 1865, 205 and 110 appears to have suffered from this disease.

During the last four quarters the fluctuations in the Scarlet Fever return have been comparatively slight. During the last thirteen weeks the total number of new cases was 121, of which 7, or 1 in every 17, terminated fatally. Eighteen of the sufferers applied for relief at the Salford Hospital and 17 at the Chorlton Dispensary, while 16 were treated by Mr. Westmacott in the Ardwick Poor Law District.

One thousand five hundred and forty-seven cases are ascribed to Bronchitis, Influenza, and kindred affections of the respiratory organs, while the deaths amounted to 45, or 1 in 29. In the two preceding quarters the rate of mortality was considerably lower.

Though the seizures from Pleurisy and Pneumonia did not exceed 145, the deaths (15) relatively to cases were numerous, being in the proportion of 1 to 9.

Under Constitutional Syphilis 464 cases were returned and 13 deaths. A large proportion of the sufferers from this

affection apply for relief at the Royal Infirmary and at the Manchester Workhouse. Thus, among the out-patients of the Royal Infirmary, 189 cases were seen, and at the Manchester Workhouse 136. In the preceding quarter the return under this column was still heavier, the out-patients at the Infirmary having risen to 227, or nearly as many as sought relief from Consumption.

JOHN ED. MORGAN, M.D., M.A., OXON.,
Hon. Sec. Sanitary Association.

Communications for the Committee may be addressed to—

THOMAS TURNER, Esq., Chairman,
77, Mosley Street.

Dr. NOBLE, Deputy Chairman,
Piccadilly.

OLIVER HEYWOOD, Esq., Treasurer,
St. Ann's Street.

The Honorary Secretaries, { Dr. MORGAN, 1, St. Peter's Square.
C. H. KNIGHT, Esq., 75, Mosley Street.

Or to

Mr. C. G. CARTLEDGE, Secretary,
At the Offices of the Association, 33, Pall Mall,
(Near to the Bank of England.)

MANCHESTER AND SALFORD

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC *New Cases of Disease coming under Treatment*

MANCHESTER.																
Area in Statute Acres	Manchester Township 1,645															
Population in 1861	,, ,, 185,050															
DISEASES.	POOR LAW DISTRICTS.							PUBLIC INSTITUTIONS.								
	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts	Workhouse	ROYAL INFIRMARY.					CHILDREN		City Gaol
	1	2	3	4	5	6		7	In-patients	Out-patients	District I.	District II.	District III.	St. Mary's Hospital	Clinical Hospital	
Small-pox .....	..	..	..	..	1	..	1	..	1	..	..	..	..	..	..	..
Chicken-pox .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..
Measles	1	1	2	5	..	10	19	..	..	1	..	..	1	3	1	..
Scarlatina .....	..	8	3	1	9	1	22	4	1	..	1	..	12	..	8	..
Diphtheria .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	..
Whooping-cough .....	..	..	..	1	..	..	1	..	..	1	..	..	..	17	..	..
Croup .....	..	..	..	..	..	2	2	..	..	..	..	..	..	..	..	..
Diarrhoea.....	1889	192	253	137	18	222	2711	88	4	145	9	3	20	165	249	60
Dysentery	4	3	..	1	2	4	14	14	2	2	1	..	..	10	..	4
Continued Fever	35	37	26	16	50	52	216	209	74	4	7	32	37	31	..	5
Erysipelas .....	..	..	..	1	1	3	5	13	1	9	..	3	2	..	..	1
Rheumatism	10	6	2	4	4	9	35	176	25	177	7	14	16	7	38	14
Neuralgic Affections .....	..	..	2	..	..	..	2	25	20	48	1	2	3	2	32	21
Constitutional Syphilis	3	..	..	1	..	2	6	136	2	189	3	2	4	3	13	29
Phthisis	2	8	7	5	..	1	23	74	7	242	18	20	17	5	20	3
Insanity	1	3	4	1	..	4	13	74	..	1	..	..	..	..	1	..
Bronchitis, Influenza & Catarrh	14	32	18	13	16	32	125	289	7	264	18	23	12	30	188	42
Pleurisy and Pneumonia	7	6	1	1	..	3	18	18	11	19	3	6	7	1	7	..
Skin Diseases	2	5	1	..	1	2	11	131	..	121	1	1	1	24	203	35
Dyspepsia	3	8	..	1	4	1	17	243	3	267	2	2	4	25	196	28
Atrophy and Anæmia.....	..	..	1	..	1	11	13	10	..	..	..	..	..	..	..	..
Accidents and diseases not classified	219	65	99	80	49	142	654	322	522	3003	54	60	104	478	201	25
TOTAL	2190	374	419	268	156	501	3908	1826	680	4493	125	168	240	801	1168	267

Medical Officers to whom the Association

(1) Mr. R. M. Mann,
 (2) „ J. Broadbent,
 (3) „ Edward Meacham,
 (4) Dr. Braddon,

(5) Mr. Octavius Dean,
 (6) Dr. Ledward,
 (7) Mr. T. J. Webster,
 (8) Dr. George Reed,

(9) } Mr. Theodore Fennell,
 (10) } „ W. H. Sutcliffe,
 (11) } „ W. J. Tattersall,
 (12) }
 (13) „ H. Runcorn,

ANITARY ASSOCIATION.

STITUTIONS OF MANCHESTER AND ADJOINING DISTRICTS.

ring the Quarter ending the 22nd of September, 1866.

SALFORD.				HULME.			CHORLTON.		ARDWICK.	PENDLETON AND PENDLEBURY.					DEATHS.
..... 1,329 .....				..... 477 .....			.. 646 ..		..508..	..... 2,650 .....			.....Area in Statute Acres.	
!... 70,967 .. ...				.. 68,209.....			..44,850..		21,739	..... 24,448 .....			.....Population in 1861.	
OR LAW DISTRICT.	PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.											
Regent Road	Workhouse	Dispensary	New Bailey	St. George's	Medlock	St. Philip's	Poor Law District	Dispensary	Poor Law District	Ardwick & Ancoats Dispensary	Chorlton Union Workhouse	Total.	DISEASES.		
17	18	19	20	21	22	23	24	25	26	27	28				
..	..	3	..	..	..	..	..	..	..	..	..	5	Small-pox .....	..
..	..	..	..	..	..	..	..	1	..	..	3	6	Chicken-pox .....	..
..	..	1	..	9	8	4	3	27	..	..	31	108	Measles	7
..	1	18	..	11	3	4	..	17	16	2	1	121	Scarlatina	7	
..	..	..	..	..	1	..	..	..	..	..	..	1	Diphtheria .....	..
..	..	4	..	1	2	1	3	1	4	..	1	45	Whooping-cough	1	
..	..	1	..	..	..	1	..	1	2	..	..	7	Croup	1
297	37	168	61	61	53	44	47	97	17	36	32	4720	Diarrhoea ..	61	
3	..	12	1	..	..	3	2	1	2	..	2	82	Dysentery ..	..
15	43	114	1	35	15	29	17	9	7	24	49	992	Continued Fever	74	
2	1	16	1	5	1	..	..	6	1	6	4	78	Erysipelas	4
10	7	106	1	4	14	6	19	22	9	33	32	784	Rheumatism .....	..
6	1	21	..	..	4	1	..	7	..	18	..	217	Neuralgic Affections	1
1	2	33	1	5	..	..	3	9	1	2	20	464	Constitutional Syphilis	13
6	15	91	..	6	2	4	8	14	2	31	17	633	Phthisis	77	
3	9	..	..	3	1	..	2	3	2	..	..	117	Insanity	1
41	13	159	27	24	24	19	36	27	30	71	50	1547	Bronchitis, Influenza, & Catarrh	54	
4	..	20	..	2	2	2	..	9	1	7	8	145	Pleurisy and Pneumonia.....	15	
1	11	202	..	7	6	6	5	13	6	16	103	912	Skin Diseases .....	..
20	7	177	5	2	20	5	24	19	23	38	37	1178	Dyspepsia	1	
..	..	..	..	1	..	..	10	13	..	..	..	47	Atrophy and Anæmia	13
108	79	1051	28	41	43	70	84	410	50	296	530	8298	{ Accidents and diseases not } { classified	366	
517	226	2197	126	217	199	199	263	706	173	580	920	20505 TOTAL		696

is indebted for the annexed Returns.

(14) Dr. Whitehead,
 (15) „ J. Ogden Fletcher,
 (16) Mr. J. Teale,
 (17) Dr. T. M. Johnson,
 (18) Mr. George Clements,

(19) Mr. J. O. Bradbury,
 (20) Dr. Braddon,
 (21) Mr. John Smith,
 (22) Dr. Alex. Wilson,
 (23) Mr. H. M. Williamson,

(24) Mr. Joseph Foster,
 (25) „ John Rayner,
 (26) „ J. V. L. Westmacott,
 (27) „ John A. Hatoock,
 (28) „ S. Woodcock.

RETURN OF BIRTHS AND DEATHS FOR

COMPILED BY

TOWNSHIP OF	POPULATION 1861.	<i>Deaths for the Quarters ending September</i>				
		1866	1865	1864	1863	1862
Manchester	185,410	1701	1783	1432	1645	1200
Salford	71,002	584	649	509	615	408
Pendleton and Pendlebury. }	24,448	129	158	114	147	89
Chorlton	44,795	243	288	194	269	197
Hulme and Moss Side	71,128	497	488	405	578	364
Ardwick	21,746	147	180	150	165	109
TOTAL.....	418,529	3301	3546	2804	3419	2367

It has been thought advisable that the mortality return be remodelled ; the deaths from the several causes, hitherto given separately, are now included in the general grouping. For more detailed information, reference can be made to the Weekly Returns. Moreover, the rate of death to population is omitted, as it is impossible to ascertain with anything like accuracy the variation of population from year to year. To assume that the rate of increase will be the same as it was during the ten years preceding the last census will certainly, in this locality, lead to error. An illustration in proof may be supplied by the fact that the increase of population in the township of Manchester at the census of 1851, from the previous one of 1841, was about 15 per

QUARTERS ENDING SEPTEMBER 1862 TO 1866.

MR. WILLIAM ROYSTON.

<i>Births for the Quarters ending September</i>					POPULATION	TOWNSHIP
1866	1865	1864	1863	1862	1861	OF
1625	1662	1657	1645	1766	185,410	..... Manchester
754	757	718	732	671	71,002	..... Salford
222	247	211	229	249	24,448	..... { Pendleton and Pendlebury
402	422	325	365	388	44,795	..... Chorlton
722	763	723	702	731	71,128	Hulme and Moss Side
266	261	283	244	237	21,746	..... Ardwick
3991	4112	3917	3917	4042	418,529	..... TOTAL

cent., but at the census of 1861 the population had decreased nearly 1 per cent.; and again, in Hulme, at the census of 1841, the increase from 1831 was about 200 per cent., and at that of 1851 it was about 100 per cent., but at that of 1861 the increase was only about 30 per cent. The plan of estimating a certain number of persons for each house built is also fallacious, as the density of population varies in towns considerably with the circumstances of the times. The method adopted in previous tables of adding the excess of births over deaths cannot yield accurate results, because it does not include the effects of emigration and immigration.

Manchester and Salford Sanitary Association.

FOURTH
QUARTERLY REPORT
OF THE
HEALTH
OF
MANCHESTER AND SALFORD,
FOR THE YEAR 1866;

*Compiled from the Weekly Returns of the Sanitary Association,
and presented to the Committee.*

MANCHESTER:
POWLSON & SONS, PRINTERS, BOW ST., JOHN DALTON STREET.
1867.

MANCHESTER AND SALFORD SANITARY ASSOCIATION.

Committee and Officers for the Year 1866.

President :

The Right Rev. The LORD BISHOP OF MANCHESTER.

Vice-Presidents :

The Worshipful the MAYOR of MANCHESTER.

The Worshipful the MAYOR of SALFORD.

The Very Rev. the DEAN of MANCHESTER.

MARQUIS of HARTINGTON.

Hon. ALGERNON EGERTON, M.P.

Sir E. ARMITAGE.

Sir JAS. BARDSLEY, M.D.

Rev. Canon RICHSON, M.A.

THOMAS BAZLEY, Esq., M.P.

W. FAIRBAIRN, Esq., LL.D., F.R.S.

A. H. HEYWOOD, Esq.

JOHN CHEETHAM, Esq., M.P.

J. A. TURNER, Esq.

JOS. WHITWORTH, Esq., M.Inst.C.E.

Treasurer :

Mr. OLIVER HEYWOOD.

Chairman :

Mr. THOMAS TURNER, F.L.S., F.R.C.S.

Deputy-Chairman :

Dr. NOBLE, M.A.

Committee :

Mr. Councillor BOOTH.

Dr. F. CRACE CALVERT,
F.R.S.

Mr. C. E. CAWLEY,
M.Inst.C.E.

Mr. S. P. CALLENDER.

Dr. J. S. FLETCHER.

Mr. GEORGE GREAVES,
M.R.C.S.

Mr. WILLIAM HEATH,
M.R.C.S.

Mr. J. W. JACKSON.

Mr. Councillor KING.

Dr. LEDWARD.

Mr. T. MACKERETH,
F.R.A.S., M.B.M.S.

Mr. F. MARRIOTT.

Mr. J. W. MACLURE,
F.R.G.S., F.S.S.

Mr. THOMAS MELLOR,
F.R.C.S.

Mr. A. RANSOME, M.A.,
M.B., M.R.C.S.

Dr. ROSCOE, B.A.

Mr. WM. ROYSTON.

Dr. SAMELSON.

Dr. SIMPSON.

Dr. R. A. SMITH, F.R.S.

Mr. J. TEALE, M.R.C.S.

Mr. G. V. VERNON,
F.R.A.S., M.B.M.S.

Dr. M. A. EASON WIL-
KINSON.

Mr. W. J. WILLIAMS.

Rev. F. C. WOODHOUSE.

Honorary Secretaries :

Dr. MORGAN. | Mr. C. H. KNIGHT.

Communications for the Committee may be addressed to—

THOMAS TURNER, Esq., Chairman,
77, Mosley Street.

Dr. NOBLE, Deputy Chairman,
Piccadilly.

OLIVER HEYWOOD, Esq., Treasurer,
St. Ann's Street.

The Honorary Secretaries, { Dr. MORGAN, 1, St. Peter's Square.
C. H. KNIGHT, Esq., 75, Mosley Street.

Or to

Mr. C. G. CARTLEDGE, Secretary,
At the Offices of the Association, 33, Pall Mall,
(Near to the Bank of England.)

F O U R T H

Q U A R T E R L Y R E P O R T,

FOR THE YEAR 1866.

THE Fourth and last Quarter of the year 1866 commenced on Saturday, the 22nd of September, and terminated on Saturday, the 22nd of December. It thus contained exactly thirteen weeks, in the course of which 19,125 new cases of disease and injuries occasioned by accidents were observed in the public practice of Manchester and Salford—the weekly average being 1,469. In the corresponding quarter of 1865 the disease returns were somewhat heavier, 19,485 new cases being recorded. The deaths at that time, among patients of the same class, amounted to 828, or 1 in every 23; in the present return they were less numerous, not exceeding 745, or 1 in every 25.

The Weekly Tables of the Sanitary Association (from which these Reports are compiled) supply some interesting information respecting the distribution of these 19,125 cases of sickness and injury; and, first, as regards the number attended by the medical staff of the principal Hospitals and Dispensaries in the town. The returns of the Royal Infirmary exhibit a total of 5,431, of which 4,159 were out-patients, 669 home-patients, and 603 in-patients. At the Salford Hospital 2,727 persons applied for relief; at the Clinical Hospital 1,130; at St. Mary's Hospital 815; at the Chorlton Dispensary 784; and, at the Ard-

wick and Ancoats Dispensary, 757; giving a grand total of 11,644 hospital cases. The remaining 7,481 were attended by the medical officers of the various Workhouses and Poor Law Districts. These cases were distributed among the Workhouses in the following proportions:—1,960 were admitted into the Manchester Workhouse, 1,214 into the Chorlton, and 279 into the Salford Workhouse. The number of patients attended as home-patients by the Poor Law District medical officers ranged from 411 (the number returned by Dr. Johnson in the Regent Road District) to 159.

In the course of the quarter there were 1,150 new cases of Continued Fever; under the generic term Continued Fever being included Typhus, Typhoid, and simple Fever, or Febricula. As nearly as can be estimated from the Weekly Returns about 550 of these cases proved examples of true Typhus. Of the 1,150 Fever patients 80 died, being in the proportion of 1 death to every 14 cases. It must be borne in mind, however, that by far the greater proportion of these deaths, probably as many as 65, occurred among the Typhus sufferers. These 65 deaths among 550 patients would represent a Typhus death-rate of 1 in every 8·3 cases. On comparing these Fever returns with those of the corresponding quarter of 1865 it is satisfactory to observe a very decided improvement. In the course of that quarter 1,530 new cases were recorded, among whom there were 155 deaths, or 1 in every 9·8; whereas (as has been already observed) among the 1,150 of 1866 there were only 80, or 1 in 14; and this diminished death-rate, be it remarked, may be taken as the truest indication that the epidemic is steadily declining. For, although, as has been frequently urged in these reports, it is impossible to estimate what the rate of mortality is likely to prove in any particular epidemic, it may still be laid down as a general axiom that just in proportion as any of the fevers are more widely diffused, so are they likely to prove more fatal; in other words, whenever the cases are most numerous,

then also will the proportion of deaths to cases be the highest. On turning to particular districts we find the fever return heaviest in St. Michael's. In this quarter of the town is situated Angel Meadow where the poor are, as a rule, pitiably housed. In our preceding Report, no less than in this, the St. Michael's fever returns exceeded those of any of the remaining Poor Law Districts. In the course of the last quarter of 1865 52 cases were returned, in this 56. After the St. Michael's comes the St. George's (Manchester) District, and this is followed by that portion of the town which is known in the disease returns as No. II. District of the Royal Infirmary. The most favourable fever return is that of Chorlton, in which only 11 new cases were observed.

In our last Quarterly Report only 5 cases of Small-Pox were returned, a singularly small number when the population included in the returns is taken into account. During the late quarter, however, the sporadic cases have been pretty numerous, amounting in the aggregate to 45; in only one instance, however, did the disease terminate fatally. Eleven of the 48 cases were admitted into the Manchester Workhouse, and 9 into the Royal Infirmary.

Since the early part of 1864 Scarlet Fever has not prevailed among the poor of Manchester as an epidemic. In the four last quarters the number of new cases has not varied to any very considerable extent; in the first quarter there were 96, in the second 97, in the third 121, and in the fourth and last 109. Of these 109 cases 5, or 1 in every 21, proved fatal; 23 of these patients were attended by the medical officers of the Salford Hospital, 15 by Mr. Westmacott, in the Ardwick District, while 10 were admitted as in-patients of the Salford Workhouse.

The readers of our Weekly Summaries will be aware that attention has for some time been directed to the increasing prevalence of Measles. In the first quarter of the year 1865 there were 35 new cases, in the second 51, in the third 108, and in

the fourth 179. A far larger proportion of these cases were seen in Chorlton than in any of the remaining quarters of the town. In fact 53 were attended by the medical officers of the Chorlton Dispensary, and 20 by Mr. Joseph Foster, in the Chorlton Poor Law District; 16 more cases are entered in the return of the Clinical Hospital.

In the fourth quarter of 1865, and early part of last year, the town was visited by an epidemic of Whooping-Cough. During several successive quarters the disease steadily gained ground, and then as gradually subsided as it had before advanced. Thus, in the first quarter of 1865, there were 85 cases, in the second 99, in the third 226, and in the fourth 451. About this time the disease appeared to culminate as, in the following quarter, an improvement was observable, the cases falling to 382. This fall was continued in the course of the following three months when only 153 seizures were returned, and is still more marked in the last two quarters, when the respective numbers were 45 and 48.

Under Bronchitis and kindred affections of the chest there were 2,961 new cases and 114 deaths, being in the proportion of 1 death to every 25 cases. In the corresponding quarter of 1865 the seizures from these disorders did not exceed 2,786. In the fourth quarters of 1862 and 1863, however, the returns under this column were considerably higher, amounting respectively to 4,767 and 3,533.

Pleurisy and Pneumonia contributed 250 cases and 26 deaths, or 1 in 9.6; no fewer than 92 of these persons were admitted as in-patients of the Manchester Workhouse.

Although the seizures from Croup and Diphtheria have not lately been numerous, both diseases, whenever they do occur, prove as fatal as ever. During the late quarter 4 out of 9 cases of Croup terminated fatally, and 1 out of 3 cases of Diphtheria.

JOHN ED. MORGAN, M.D., M.A., OXON.,

Hon. Sec. Sanitary Association.

MANCHESTER AND SALFORD

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC *New Cases of Disease coming under Treatment*

MANCHESTER.															
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	,, ,, 185,050														
DISEASES.	POOR LAW DISTRICTS.							PUBLIC INSTITUTIONS.							
	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts	Workhouse	ROYAL INFIRMARY.					CHILDREN	
	1	2	3	4	5	6		7	In-patients	Out-patients	District I.	District II.	District III.	St. Mary's Hospital	Clinical Hospital
Small-pox	1	3	..	..	1	2	7	11	9	..	..	..	1	2	..
Chicken-pox .....	..	..	..	..	..	2	2	..	..	..	..	..	..	2	..
Measles	2	4	2	..	7	18	33	..	..	3	..	..	8	9	16
Scarlatina .....	..	3	1	1	8	1	14	..	..	..	1	5	8	2	3
Diphtheria .....	..	..	..	..	..	2	2	..	..	..	..	..	..	..	..
Whooping-cough .....	..	1	2	..	..	2	5	..	..	4	..	..	..	8	11
Croup	1	..	1	..	..	..	2	..	..	..	..	..	..	1	..
Diarrhœa.....	36	15	8	6	3	13	81	9	2	65	3	2	13	83	109
Dysentery .....	..	..	..	2	2	1	5	..	..	1	..	1	1	2	1
Continued Fever	32	32	51	39	28	56	238	303	30	8	15	50	38	43	2
Erysipelas	3	2	2	1	..	3	11	6	1	16	1	3	5	1	..
Rheumatism	10	9	5	4	7	6	41	132	24	204	15	17	17	6	37
Neuralgic Affections	5	..	3	..	2	..	10	8	13	37	2	1	6	8	33
Constitutional Syphilis	1	..	..	1	1	3	6	133	2	167	..	1	6	4	13
Phthisis	3	8	4	7	4	5	31	85	2	258	15	21	30	10	15
Insanity	3	1	4	..	..	2	10	53	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	62	70	28	48	36	87	331	386	11	435	20	40	54	116	281
Pleurisy and Pneumonia	3	5	..	1	..	..	9	92	6	46	7	8	12	1	10
Skin Diseases	6	4	3	..	2	6	21	123	..	107	..	..	..	39	226
Dyspepsia	7	3	..	8	7	1	26	70	3	217	2	2	8	29	194
Atrophy and Anæmia.....	..	..	1	..	5	11	17	..	..	..	..	..	..	..	..
Accidents and diseases not classified	214	63	162	99	38	118	694	549	500	2901	39	67	124	449	179
TOTAL	389	223	277	217	151	339	1596	1960	603	4469	120	218	331	815	1130

Medical Officers to whom the Association

(1) *Mr. R. M. Mann,*
 (2) *„ J. Broadbent,*
 (3) *„ Edward Meacham,*
 (4) *Dr. Braddon,*

(5) *Mr. Octavius Dean,*
 (6) *Dr. Ledward,*
 (7) *Mr. J. Westmoreland.*
 (8) *Dr. George Reed,*

(9) *Mr. W. J. Tattersall,*
 (10) *„ W. H. Sutcliffe,*
 (11) *„ C. J. Cunningham.*
 (12) *„ „*
 (13) *„ H. Runcorn,*

SANITARY ASSOCIATION.

INSTITUTIONS OF MANCHESTER AND ADJOINING DISTRICTS.

during the Quarter ending the 22nd of December, 1866.

SALFORD.					HULME.			CHORLTON.		ARDWICK.	PENDLETON AND PENDLEBURY.					DEATHS.
..... 1,329 .....					..... 477 .....			.. 646 ..		..508..	..... 2,650 .....			.....Area in Statute Acres.	
..... 70,967 .. ...					..... 68,209.....			..44,850..		21,739	..... 24,448 .....			.....Population in 1861.	
POOR LAW DISTRICT.		PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.			Poor Law District	Dispensary	Poor Law District	Ardwick & Ancoats Dispensary	Chorlton Union Workhouse	Total.	DISEASES.		
Greengate	Regent Road	Workhouse	Dispensary	New Bailey	St. George's	Medlock	St. Philip's									
16	17	18	19	20	21	22	23	24	25	26	27	28				
..	1	..	4	..	..	..	..	1	1	3	4	2	46	Small-pox	1
..	..	1	..	..	..	..	..	..	..	4	..	2	11	Chicken-pox	1
..	..	4	5	..	2	4	11	20	53	..	2	8	178	Measles	7	
..	..	10	23	..	10	5	1	1	5	15	6	..	109	Scarlatina	5	
..	..	..	..	..	..	..	..	..	..	1	..	..	3	Diphtheria	1
1	..	4	1	..	..	..	4	1	6	..	3	..	48	Whooping-cough	4
..	..	..	3	..	..	..	1	..	1	..	1	..	9	Croup	4
122	119	5	50	38	21	32	11	10	17	1	13	54	903	Diarrhoea ..	20	
2	1	..	3	..	..	4	..	1	5	..	..	1	28	Dysentery	1
22	30	54	120	..	27	24	30	11	9	23	30	40	1150	Continued Fever	80	
..	3	2	2	..	3	..	2	2	6	3	3	3	74	Erysipelas	1	
12	15	4	127	3	12	15	11	13	22	4	40	66	858	Rheumatism	3	
2	3	1	19	..	1	..	2	3	6	1	18	1	185	Neuralgic Affections .....	..
1	2	..	39	1	3	1	1	1	7	4	12	37	473	Constitutional Syphilis	4	
11	8	18	92	1	7	8	5	12	9	8	34	45	725	Phthisis	95	
4	2	16	..	..	1	..	..	4	1	..	1	..	92	Insanity .....	..
66	73	25	441	31	60	46	34	64	90	36	108	174	2961	Bronchitis, Influenza, & Catarrh	114	
..	5	1	24	2	1	..	2	..	5	..	8	11	250	Pleurisy and Pneumonia	26	
10	2	30	234	..	2	..	2	7	11	8	20	164	1037	Skin Diseases .....	..
6	27	1	177	7	1	13	2	30	23	13	64	58	1009	Dyspepsia	1	
..	..	2	..	..	..	..	..	8	12	..	..	2	41	Atrophy and Anæmia	4
98	120	101	1365	26	63	51	66	66	495	31	390	546	8945	{ Accidents and diseases not classified	373	
357	411	279	2729	109	214	203	185	255	784	155	757	1214	19135 TOTAL		745

is indebted for the annexed Returns.

(14) Dr. Whitehead,
 (15) „ J. Ogden Fletcher,
 (16) Mr. J. Teale,
 (17) Dr. T. M. Johnson,
 (18)

(19) Mr. J. O. Bradbury,
 (20) Dr. Braddon,
 (21) Mr. John Smith,
 (22) Dr. Alex. Wilson,
 (23) Mr. H. M. Williamson,

(24) Mr. Joseph Foster,
 (25) „ John Rayner,
 (26) „ J. V. L. Westmacott,
 (27) „
 (28) „ S. Woodcock.

RETURN OF BIRTHS AND DEATHS FOR

COMPILED BY

TOWNSHIP OF	POPULATION 1861.	<i>Deaths for the Quarters ending December</i>				
		1866	1865	1864	1863	1862
Manchester	185,410	1598	1927	1503	1628	1569
Salford	71,002	564	698	540	515	478
Pendleton and Pendlebury. }	24,448	159	218	160	152	152
Chorlton	44,795	239	298	182	291	221
Hulme and Moss Side	71,128	474	511	395	538	467
Ardwick	21,746	153	190	147	162	155
TOTAL.....	418,529	3187	3842	2927	3286	3042

It has been thought advisable that the mortality return be remodelled; the deaths from the several causes, hitherto given separately, are now included in the general grouping. For more detailed information, reference can be made to the Weekly Returns. Moreover, the rate of death to population is omitted, as it is impossible to ascertain with anything like accuracy the variation of population from year to year. To assume that the rate of increase will be the same as it was during the ten years preceding the last census will certainly, in this locality, lead to error. An illustration in proof may be supplied by the fact that the increase of population in the township of Manchester at the census of 1851, from the previous one of 1841, was about 15 per

QUARTERS ENDING DECEMBER 1862 TO 1866.

MR. WILLIAM ROYSTON.

<i>Births for the Quarters ending December</i>					POPULATION	TOWNSHIP
1866	1865	1864	1863	1862	1861	OF
1624	1703	1645	1656	1608	185,410	..... Manchester
801	715	752	727	667	71,002	..... Salford
259	256	247	203	222	24,448	..... { Pendleton and Pendlebury
367	370	373	368	354	44,795	..... Chorlton
754	664	680	769	719	71,128	Hulme and Moss Side
254	295	265	250	237	21,746	..... Ardwick
4059	4003	3962	3973	3807	418,529	..... TOTAL

cent., but at the census of 1861 the population had decreased nearly 1 per cent.; and again, in Hulme, at the census of 1841, the increase from 1831 was about 200 per cent., and at that of 1851 it was about 100 per cent., but at that of 1861 the increase was only about 30 per cent. The plan of estimating a certain number of persons for each house built is also fallacious, as the density of population varies in towns considerably with the circumstances of the times. The method adopted in previous tables of adding the excess of births over deaths cannot yield accurate results, because it does not include the effects of emigration and immigration.

RETURN OF BIRTHS AND DEATHS

COMPILED BY

TOWNSHIP OF	POPULATION 1861.	<i>Deaths for the Years ending December</i>				
		1866	1865	1864	1863	1862
Manchester	185,410	6932	7156	6076	6514	5963
Salford	71,002	2548	2458	2203	2119	2074
Pendleton and Pendlebury. }	24,448	649	676	566	584	
Chorlton	44,795	1085	1118	960	1100	845
Hulme and Moss Side	71,128	2108	1943	1831	2068	1689
Ardwick	21,746	667	656	637	673	566
TOTAL.....	418,529	13989	14007	12273	13058	11137

In the course of the years 1865 and 1866, the deaths

It has been thought advisable that the mortality return be remodelled; the deaths from the several causes, hitherto given separately, are now included in the general grouping. For more detailed information, reference can be made to the Weekly Returns. Moreover, the rate of death to population is omitted, as it is impossible to ascertain with anything like accuracy the variation of population from year to year. To assume that the rate of increase will be the same as it was during the ten years preceding the last census will certainly, in this locality, lead to error. An illustration in proof may be supplied by the fact that the increase of population in the township of Manchester at the census of 1851, from the previous

FOR THE YEARS 1862 TO 1866.

MR. WILLIAM ROYSTON.

<i>Births for the Years ending</i> <i>December</i>					POPULATION	TOWNSHIP
1866	1865	1864	1863	1862	1861	OF
6742	6835	6838	6994	7020	185,410	..... Manchester
3109	3004	3064	2961	2959	71,002	..... Salford
989	993	1010	956	—	24,448	..... { Pendleton and Pendlebury.
1576	1607	1466	1510	1532	44,795	..... Chorlton
3032	2896	2968	3062	2955	71,128	Hulme and Moss Side
1114	1106	1152	1016	955	21,746	..... Ardwick
16562	16441	16498	16499	15421	418,529	..... TOTAL

in the Township of Manchester, exceeded the births by 511.

one of 1841, was about 15 per cent., but at the census of 1861 the population had decreased nearly 1 per cent.; and again, in Hulme, at the census of 1841, the increase from 1831 was about 200 per cent., and at that of 1851 it was about 100 per cent., but at that of 1861 the increase was only about 30 per cent. The plan of estimating a certain number of persons for each house built is also fallacious, as the density of population varies in towns considerably with the circumstances of the times. The method adopted in previous tables of adding the excess of births over deaths cannot yield accurate results, because it does not include the effects of emigration and immigration.

A
R E C O M M E N D A T I O N

FROM THE

MANCHESTER AND SALFORD

Sanitary Association.

The Manchester and Salford Sanitary Association, impressed with the importance of sanitary science as available for beneficial application, deem it right to call the attention of the authorities and of the public to the desirableness of instituting, in this locality, some more efficient sanitary police than is in force at present.

And they would urge, more particularly, the necessity of appointing some competent medical man, well and practically skilled in this department of investigation, as an Officer of Health.

Without such an authorised and experienced head of a sanitary police, they would submit that the efficient action of public bodies, in attempts to apply the results of sanitary researches, will necessarily be impeded—whether such attempts be made in ordinary times for the diminution and prevention of current disease, or for the mitigation and suppression of epidemics in their seasons of invasion.

The reduction to practice of sanitary science is not, as is sometimes supposed, a mere affair of removing what are called nuisances ; it involves a great deal more than this,—the carrying out of building regulations, so as to secure due ventilation, supplies of water and house drainage, the management of incidental outbreaks of contagious diseases so that their unnecessary diffusion be prevented, and the skilful carrying out of right methods of disinfection in periods of apprehended pestilence.

To advise public bodies upon all such matters ; to assist, so far as practicable, in giving effect to his own recommendations, would constitute the duties of an Officer of Health.

Besides, in seasons and circumstances of extraordinary pressure from the prevalence of epidemic disease, such an officer would be in constant communication and co-operation with district and other medical officers, with a view to practical efficiency in the carrying out of measures of special and temporary aid.

Various divisions of the Metropolis, Liverpool, Leeds, Bristol, and some other large towns, influenced by some such considerations as those just advanced, have already their Officers of Health.

In this respect Manchester and Salford are behind other places.

For the above reasons, therefore, the Manchester and Salford Sanitary Association would urge upon the authorities that a similar appointment take place here.

Without this proceeding, as a first step, they apprehend that a correct and beneficial application of sanitary science cannot be made.

Signed on behalf of the Association,

THOMAS TURNER,

CHAIRMAN OF THE COMMITTEE.

Rooms of the Association,
33, *Pall Mall,*

DECEMBER, 1866.

